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FOREST MANAGEMENT AND STUMP-TO-FOREST GATE CHAIN-OF-CUSTODY SURVEILLANCE EVALUATION REPORT

Indiana Department of Natural Resources, Division of Forestry

SCS-FM/COC-00099N

402 West Washington Street, Room W296

Indianapolis, Indiana, 46204

John Seifert, jseifert@dnr.in.gov

<http://www.in.gov/dnr/forestry/>

| CERTIFIED | EXPIRATION |
|-------------|-------------|
| 11/Jul/2012 | 10/Jul/2017 |

| DATE OF FIELD AUDIT |
|---------------------|
| 10/15/12 |
| DATE OF LAST UPDATE |
| 12/25/12 |

Organization of the Report

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Forest Stewardship Council. This section is made available to the general public and is intended to provide an overview of the evaluation process, the management programs and policies applied to the forest, and the results of the evaluation. Section A will be posted on the FSC Certificate Database (<http://info.fsc.org/>) no less than 30 days after issue of the certificate. Section B contains more detailed results and information for the use of by the FME.

FOREWORD

| Cycle in annual surveillance audits | | | |
|--|---|---|---|
| <input checked="" type="checkbox"/> 1 st annual audit | <input type="checkbox"/> 2 nd annual audit | <input type="checkbox"/> 3 rd annual audit | <input type="checkbox"/> 4 th annual audit |
| Name of Forest Management Enterprise and abbreviation used in this report: | | | |
| Indiana Department of Natural Resources, Division of Forestry (DOF) | | | |

All certificates issued by SCS under the aegis of the Forest Stewardship Council (FSC) require annual audits to ascertain ongoing compliance with the requirements and standards of certification. A public summary of the initial evaluation is available on the SCS website www.scscertified.com.

Pursuant to FSC and SCS guidelines, annual / surveillance audits are not intended to comprehensively examine the full scope of the certified forest operations, as the cost of a full-scope audit would be prohibitive and it is not mandated by FSC audit protocols. Rather, annual audits are comprised of three main components:

- A focused assessment of the status of any outstanding conditions or Corrective Action Requests (CARs; see discussion in section 4.0 for those CARs and their disposition as a result of this annual audit);
- Follow-up inquiry into any issues that may have arisen since the award of certification or prior to the audit; and
- As necessary given the breadth of coverage associated with the first two components, an additional focus on selected topics or issues, the selection of which is not known to the certificate holder prior to the audit.

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SECTION A – PUBLIC SUMMARY

1.0 GENERAL INFORMATION

1.1 Annual Audit Team

| | | | |
|---|-------------------|----------------------|--------------|
| Auditor Name: | Dave Wager | Auditor role: | Lead Auditor |
| <p>Qualifications: As previous FM Director for SCS, Dave spent ten years managing and/or leading Forest Stewardship Council (FSC) endorsed certification assessments on more than 100 forest management operations covering over 25 million acres of forestland across 16 countries. As a certification practitioner, Dave Wager has led FSC forest management and chain-of-custody assessments on a range of private and public operations across North America, Asia, and Latin America. In other natural resources work, Dave played a key role in the development of Starbucks CAFE Practices- a program to ensure procurement of sustainably grown and processed coffee. Dave has 17 years' experience working in forestry and the environmental field. He has expertise in forest ecology and business (B.S. business, Skidmore College; M.S. Forest Resources, Utah State University). While studying forest ecology at Utah State University, Dave was awarded a NASA Graduate Student Research Fellowship to develop dendrochronological techniques to assess Douglas-fir growth in Utah's Central Wasatch Mountains.</p> | | | |
| Auditor Name: | Norman Boatwright | Auditor role: | FSC Auditor |
| <p>Qualifications: Mr. Boatwright manages his own forestry consulting firm. He has over twenty-eight years experience in intensive forest management, seventeen years experience in environmental services and seven years experience in SFI auditing. He has conducted Phase I Assessments on over two hundred and fifty projects covering 2,000,000 acres, ESA and Endangered Species Assessment on timberland across the South, and managed soil mapping projects over 1.3 million acres. From 1985-1999, he was Division Manager at Canal Forest Resources, Inc. and was responsible for all forest management activities on about 90,000 acres of timberland in eastern South Carolina. Duties included budgeting and implementing land and timber sales, site preparation, planting, best management practices, road construction, etc. Norman is a Qualified Lead Auditor under the NSF-ISR SFI Program with extensive experience auditing procurement and land management organizations.</p> | | | |

1.2 Total Time Spent on Evaluation

| | |
|---|----------|
| A. Number of days spent on-site assessing the applicant: | 2.5 |
| B. Number of auditors participating in on-site evaluation: | 2 |
| C. Additional days spent on preparation, stakeholder consultation, and post-site follow-up: | 1 |
| D. Total number of person days used in evaluation: | 7 |

1.3 Standards Employed

1.3.1. Applicable FSC-Accredited Standards

| Box 1.3.1. – Applicable FSC-Accredited Standards | | |
|--|---------|----------------------|
| Title | Version | Date of Finalization |

| | | |
|---|------|-----------------|
| FSC US Forest Management Standard | V1-0 | 8 – July – 2010 |
| All standards employed are available on the websites of FSC International (www.fsc.org), the FSC-US (www.fscus.org) or the SCS Forest Conservation Program homepage (www.scs-certified.com/forestry). Standards are also available, upon request, from Scientific Certification Systems (www.scs-certified.com). | | |

2.0 ANNUAL AUDIT DATES AND ACTIVITIES

2.1 Annual Audit Itinerary and Activities

| 15 – Oct – 2012 | |
|--|--|
| FMU/Location/ sites visited | Activities/notes |
| Opening meeting | Interviews with DOF staff and supporting DNR staff |
| Auditors: Dave Wager and Norman Boatwright at Morgan-Monroe State Forest | |
| Stop 1: Completed Timber Sale 6371312 Morgan-Monroe State Forest | This was a 31 acre marked sale with a regeneration cut. Harvest was completed in March 2011. The Resource Management Guide for this sale addressed all of the necessary conditions/treatments including: history, landscape context, topography, geology and hydrology, soils, access, boundary, wildlife, T/E occurrence (none), recreation, cultural considerations and a silvicultural prescription with proposed activities. Single tree selection focused on retaining good crop trees and the regeneration cut focused on removing mature planted pine. Regeneration openings averaged 3 acres in size and were strategically located. Regeneration openings also had good snag retention. Haul roads and skid trails had adequate gravel and water bars. Open areas at log decks were grassed. The timber sale inspection process was adequate. Tuliptree scale and drought were impacting tulip poplars. |
| Stop 2: Single Tree Selection 6371314 Morgan-Monroe State Forest | This 100 acre mixed hardwood stand marked for harvest. Sold but not harvested. This will be the 3 rd harvest in this tract, It is a very productive site with 9-10 mbf per acre. Marking of approximately 2 mbf/acre. Understory with beech maple makes any oak/hickory regeneration difficult at this time. |
| Stop 3: Old CCC Camp Morgan-Monroe State Forest | This is an example of INDOF maintaining special sites. Site consisted of evidence of a CCC residential camp with concrete |

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| | structures and building foundations. |
| Stop 4: Single Tree Selection 6370702 Morgan-Monroe State Forest | This was an active sale of a 65 acre mixed hardwood site. Canopy gaps and single tree selection are being created to improve the overall vigor of the stand. TSI is recommended within a year post-harvest to complete regeneration openings, to deaden cull trees and to release future crop trees. Review of Timber Sale Visitation & Evaluation Records indicates they were completed correctly. Interview with employee of logging contractor. Contractor's employees wore proper safety equipment and understood their safety requirements. Abundance of snags and cavity trees in all size classes. Rutting kept to primary skid trail. Residual damage in check. There was no link to desired future condition in tract management guide. |
| Stop 5: Single Tree Selection 6371203 Morgan-Monroe State Forest | This was a 104 acre marked sale with a large regeneration cut. Sale was closed out in April 2012. Sale area contains 2 American Chestnut trees which were marked for retention. Sale area contained a hiking trail where impacts were minimized by the application of a visual enhancement along the trail. Reviewed a portion of the trail and concluded impacts of harvesting on hiking trail were minimized. 2 nd landing not seeded and had mix of weeds. Some stiltgrass on skid trails, and no treatment was done. |
| Stop 6: Hardwood Ecosystem Experiment Morgan-Monroe State Forest | This is a long-term, large-scale experimental study of forest management and its impacts on plants and animals conducted and funded by INDNR, The Nature Conservancy, National Geographic Society, and Purdue University. Audit visited a portion of the study area set up for public interaction including a sign, pamphlets and walking trails. |
| Stop 7: Single Tree Selection 6371409 Morgan-Monroe State Forest | This was an 84 acre marked sale that has not been cut. The sale was marked for timber stand improvement with the removal of low quality, poorly formed or low grade timber species to favor the quality oaks, hickory and mixed hardwood. Resource Management Guide was completed correctly. A hiking trail runs through portion of tract's access roadway. The tract is adjacent to a new Nature Preserve. |

| 16 – Oct – 2012 | |
|---|--|
| FMU/Location/ sites visited | Activities/notes |
| Dave Wager at Clark State Forest | |
| Stop 1: 2012 Tornado damage salvage | Severe tornado damage on Clark State Forest from March 2012. Approximately 779 acres of heavy damage in primary tornado zone and 473 acres of moderate damage in secondary zone. Salvage strategy was to allow complete removal in the primary zone (i.e., logger could harvest all merchantable standing and down material) and selective harvest/salvage in the secondary zone. |
| 1.a. Block 1 | <p>2.5 miles of fire/management road improved for salvage. Road was well designed and had good rock coverage. Two concerns about the primary zone in block 1 were the lack of wildlife retention guidelines for the clear-cut zone and concern about invasive plants coming as there was a lot of exposed mineral soil in the primary harvest unit.</p> <p>Secondary unit had excessive residual damage and some slopes were missing water bars. The performance deposit or a portion of the deposit will be withheld from operator. All loggers had had BMP training.</p> |
| 1.b. Blocks 3 and 4 | Active salvage operations. Observed feller with proper safety equipment. Some BMP concerns as there are no temporary closeouts in sections of the block and there were long steep skid trails without waterbars. An area of minor to intermediate tornado damage originally left out of the harvest had been added into the block by the forester without going through the proper process. Supervisor identified this and ceased operations in the expanded area. |
| Stop 2: Single Tree Selection 6301101 Clark State Forest | Active harvest on 184 acres adjacent to Deam Lake. Harvest marked as an improvement cut. Some trees that had been marked for harvest were blacked out indicting a good internal review process. No BMP concerns. Main skid road was a management access road also designated as a horse trail. Trail was temporarily closed during the harvest. DoF closed off horse access to an illegal campsite on Deam Lake that had |

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| | been suffering from overuse. |
| FMU/Location/ sites visited | Activities/notes |
| Norman Boatwright at Clark State Forest | |
| Stop 1: Active Harvest 6300505 & 6 Clark State Forest | This was an active 322 acre single tree selection harvest with a large regeneration opening. The Resource Management Guide contained the required information. Nice white oak stand. Logger interviewed. |
| Stop 2: Virginia Pine Harvest 6300801 Clark State Forest | This was a 35 acre final harvest cut with 2 islands of the original stand retained. Sale was closed out in July 2012. Sale area contained a horse trail that was also a skid trail so water bars were not installed but the trail was outsloped to allow water to run off. |
| Stop 3: Single Tree Selection 6300411 Clark State Forest | This was a 291 acre marked sale with no regeneration openings. Sale was closed out in November 2011. The Resource Management Guide contained the required information. Good water bars on skid trails and the Timber Sale Visitation & Evaluation Records were completed correctly. |
| Stop 4: Timber Stand Improvement Activity 6300907 Clark State Forest | This was a 314 acre post-harvest TSI consisting of girdling and or chemical application to cull trees and all trees remaining in the 3 regeneration openings. Contract required the work be done by a licensed commercial pesticide applicator and professional forester. |
| 16 – Oct – 2012 | |
| FMU/Location/ sites visited | Activities/notes |
| Auditors: Dave Wager and Norman Boatwright at Harrison Crawford State Forest | |
| Stop 1: Timber Stand Improvement 6342103 Harrison Crawford State Forest | This was a timber stand improvement treatment over 111 acres. Activities included girdling/chemical application to all cull trees and all trees remaining in the regeneration opening. Also included identification and treatment of <i>Ailanthus altissima</i> in an area to the north. TSI work appeared to be effective. Contract required the work be done by a licensed |

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| | commercial pesticide applicator and professional forester. TSI was following an improvement cut from 2010. Harvest followed Indiana Bat Habitat Guidelines and was well executed. Observed some excellent large diameter snag trees. Good advanced oak regeneration. |
| Stop 2: Single Tree Selection 6342104 Harrison Crawford State Forest | This was a 91 acre marked sale with 4 oak and 3 other regeneration openings. Oak regeneration openings had good advance regeneration. The Resource Management Guide contained the required information. Good water bars on skid trails and the Timber Sale Visitation & Evaluation Records were completed correctly. |
| 17 – Oct – 2012 | |
| FMU/Location/ sites visited | Activities/notes |
| Auditors: Dave Wager and Norman Boatwright at Harrison Crawford State Forest | |
| Stop 1: Timber Stand Improvement 6342808 Harrison Crawford State Forest | <p>This was a timber stand improvement treatment over 57 acres. Activities included girdling/chemical application to all cull trees and all trees remaining in the regeneration openings. TSI work appeared to be effective. Contract required the work be done by a licensed commercial pesticide applicator and professional forester.</p> <p>Timber harvest prior to the TSI work was an improvement cut with very low residual damage. Considerable amounts of stilt grass in the harvest area including parts of the opening.</p> <p>In route to 6342808 looked at a post oak/cedar nature preserve (RSA) that was being managed by the Division of Nature Preserves to promote its rare herbaceous plant community.</p> |
| Stop 2: Single Tree Selection 6343010 Harrison Crawford State Forest | This is a 73 acre timber stand improvement cut with a large regeneration opening. Special sites noted on the map include water fall and sinkholes, which were well protected. Good water bars on skid trails with some residual tree damage which was noted on the Timber Sale Visitation & Evaluation Records. Some cedar cut on the harvest unit providing |

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| | evidence of providing niche market opportunities. Excellent snag marking and retention. Harvest of tulip poplar helping to reduce risk of loss from drought impact. |
| Stop 3: Single Tree Selection 6343011 Harrison Crawford State Forest | No paper work available as the marking is not complete. Regeneration opening marked along north facing ridge where the poplar was declining. Marking appeared to be done correctly. Good signage and notification of upcoming harvest to hikers using the trail. |
| 17 – Oct – 2012 | |
| FMU/Location/ sites visited* | Activities/notes |
| Dave Wager and Norman Boatwright at Harrison Crawford State Forest | |
| Review of FSC and SFI findings | Auditor deliberations |
| Closing meeting | Issuance and review of preliminary findings |
| | |

3.0 CHANGES IN MANAGEMENT PRACTICES

There were no significant changes in the management and/or harvesting methods that affect the FME’s conformance to the FSC standards and policies.

4.0 RESULTS OF THE EVALUATION

4.1 Existing Corrective Action Requests and Observations

| | |
|--|---|
| Certificate holder/applicant | Indiana DNR, Division of Forestry |
| CAR/OBS identified by (SCS representative) | Kyle Meister, Norman Boatwright, and JoAnn Hanowski |
| Date of Issuance | December 5, 2011; updated 10.19.12 by Dave Wager |
| Audit Year/Type (select from pull down menu) | Recertification evaluation |

| | |
|---------------------------------------|---|
| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) 2011.1 Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) |
| | Deadline for Corrective Action by FME <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): |
| | Standard and Requirement Reference FSC US indicator 1.1.a |
| | NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> DoF received a Notice of Intent (NOI) to sue regarding Backcountry designation and Indiana Bat conservation regarding harvest on the Morgan/Monroe State Forest. DoF informed the SCS audit team of the NOI during the recertification assessment as required by indicators 1.1.a. DoF maintains that it follows the “USFWS Bloomington Field Office Forest Management Guidelines for Areas within Five Miles of Priority I & II Hibernacula for Indiana Bats (<i>Myotis sodalis</i>) (3/04)” and that under the current priority I & II areas, only areas on Harrison-Crawford State Forest fall within the 5 mile radius. SCS found that DoF staff and field foresters were knowledgeable of the interim Indiana Bat guidelines and that wildlife staff was actively involved in reviewing harvest plans for wildlife values, including bat habitat. Since stakeholder consultation and field and document evidence examined during the assessment yielded conflicting takes on this issue, SCS concludes that examination of it during the next surveillance assessment is necessary as DoF and stakeholders engage in further communication. |
| | REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> DoF provided a full briefing on the status of stakeholder allegations over Indiana Bat conservation and the Backcountry designation. DoF has agreed to follow the Indiana Bat Habitat Guidelines in all areas that the US Fish and Wildlife Service (USFWS) have requested. DoF is also in close communication with the USFWS about revising the implementing a Habitat Conservation Plan. |
| TO BE COMPLETED BY SCS | DoF has provided an update as requested in this OBS. |

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| X CLOSED | UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |

Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.2 | | |
| | Select one: | <input type="checkbox"/> Major CAR | <input checked="" type="checkbox"/> Minor CAR | <input type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | | | |
| | Deadline for Corrective Action by FME | | | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | | | |
| | Standard and Requirement Reference | FSC US indicator 1.6.a. | | |
| | NON-CONFORMITY (or Background/ Justification in the case of Observations) (Describe and provide objective evidence) DOF does not have a publicly available statement of commitment to manage the FMU in conformance with FSC standards and policies. This is a new requirement in the FSC-US standard. | | | |
| REQUESTED CORRECTIVE ACTION (or Observation) DOF shall make available a public statement of commitment to manage the FMU in conformance with FSC standards and policies. | | | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity The Division of Forestry has posted a letter of commitment to FSC on the state website at http://www.in.gov/dnr/forestry/files/fo-FSC_letter.pdf | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> FSC Commitment Letter (CAR 2011.2 FSC Commitment Letter) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/12/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> Verified that the above link is functioning and the commitment meets FSC requirements. | |
| | X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.3 |
| | Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation | |
| | Site CAR/OBS issued to (where more than one site) | |
| | Deadline for Corrective Action by FME <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicator 4.4.a. |
| | NON-CONFORMITY (or Background/ Justification in the case of Observations) (Describe and provide objective evidence) Indicator 4.4.a requires that DOF understand the likely social impacts of management activities, and incorporates this understanding into management planning and operations. Social impacts include effects on: <ul style="list-style-type: none"> • Archeological sites and sites of cultural, historical and community significance (on and off the FMU); • Public resources, including air, water and food (hunting, fishing, collecting); • Aesthetics; • Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health; • Community economic opportunities; • Other people who may be affected by management operations. A summary was not available to the CB. This is a new requirement in the FSC US standard. While the standard does not explicitly require a written summary, there is enough overlap of 4.4.a with other indicators of the standard that do require documentation (e.g., indicators 7.1.j, 7.1.n, and 8.2.d.3) that it is reasonable to assume that a documented summary is implied. | |
| | REQUESTED CORRECTIVE ACTION (or Observation) Consistent with the elements detailed in indicator 4.4.a, DOF shall prepare a summary of likely social impacts of management activities and how these are incorporated into management planning and operations. | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity The Division of Forestry developed summary of social impacts of management activities. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> Summary and Monitoring of Social Impacts of State Forest Management Activities (CAR 2011.3 2011.11 Summary and Monitoring of Social Impacts.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/3/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> Description of Summary and Monitoring of Social Impacts is sufficient to fulfill Indicator 4.4.a. The summary is included as Appendix 9 to the 2012 surveillance report. | |
| | x CLOSED <input type="checkbox"/> UPGRADED TO MAJOR <input type="checkbox"/> OTHER DECISION <i>(refer to description above)</i> | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.4 |
| | Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation | |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicators 6.3.a.1 and 6.3.a.3. |
| | NON-CONFORMITY (or Background/ Justification in the case of Observations) (Describe and provide objective evidence) <ul style="list-style-type: none"> • DOF does not have a mechanism to identify areas outside of RSAs and HCVs that would be managed for late seral conditions, although late seral objectives have been incorporated in the current Strategic Plan. Therefore, DOF cannot clearly define where it maintains, enhances, and/or restores under-represented successional stages throughout the FMU that would naturally occur on the types of sites found on the FMU. • The definitions for Old growth have been modified in the FSC-US standard. DOF cites a study done by Spetich <i>et al</i> (1997) in which spatial relationships of old growth patches ≥ 4 ha (≈ 9.9 acres) were examined. This resolution is greater than the 3 acre minimum for the Type 1 old growth designation. DOF has not assessed the presence of Type 1 and Type 2 old growth on the FMU according to new FSC US definitions. Note that the FSC US has modified the minimum acreages and conditions for types of old growth. Old growth already identified on DOF is being protected. | |
| REQUESTED CORRECTIVE ACTION (or Observation) <ul style="list-style-type: none"> • DOF shall identify areas of the FMU that are managed for late seral conditions. • DOF shall assess for the presence of Type 1 and Type 2 old growth on the FMU. Where the assessment will require further research, DOF shall establish a timeline and action plan to complete old growth classification. Measures to protect and buffer Type 1 and Type 2 old growth shall be in accordance to guidelines detailed in 6.3.a.3, including those established for public lands. | | |

TO BE COMPLETED BY FME

IMPLEMENTED CORRECTIVE ACTION (*Response to Observations is optional*)

Describe action taken by the FME to address the root cause of the non-conformity

DoF Response: Requested Corrective Action #1

DoF has identified the following areas which have all been previously designated as management units where late seral ecological communities will be maintained:

| Management Unit Type | Management Restrictions to Maintain Late Seral Conditions | Where Delineated/ Identified | Total Acreage (to nearest acre) |
|--|---|--|---------------------------------|
| Nature Preserves on State Forests | Management activities permitted only if they maintain/restore late seral conditions | DNR spatial databases | 2,369 |
| Control units (no harvest) of Hardwood Ecosystem Experiment (HEE) | No management activities except for treatment of exotic invasive species | DoF spatial databases; tract files maintained by Morgan-Monroe and Yellowwood state forests; HEE procedures guide | 638 |
| 'No harvest zone' around active Indiana bat hibernacula on state forests | No timber harvests within 20 acre buffer established around cave entrance | Spatial databases maintained by DoF wildlife biologist; IN Natural Heritage database; tract files maintained by Harrison-Crawford state forest | 100 |
| Backcountry Areas located on Morgan-Monroe/Yellowwood, Jackson-Washington, and Clark state forests | Single-tree selection harvesting only to maintain mature, relatively closed-canopy conditions | Tract files associated with affected properties, maps maintained by DoF Property Specialist, property visitor maps | 6,559 |
| Old growth areas and associated 300 foot buffer zone | See attached guidance, below | | TBD |

Total: 9,666 acres

DoF Response: Requested Corrective Action #2

DoF has developed procedures to assess and identify Type 1 and Type 2 old growth on state forests. This guidance includes definitions of old growth classifications consistent with indicator 6.3.a.1, and a continuous assessment protocol to be incorporated this point forward in the routine development of tract management guides.

Additionally, DoF is currently completing an immediate assessment of sixteen (16) candidate tracts identified by the state forest Continuous Forest Inventory as tracts containing canopy trees ≥ 150 years old. State forest properties are completing a review of harvest history for each candidate tract, which is expected to be completed by the 2012 audit. If this immediate assessment identifies tracts where additional, field surveys for old growth characteristics are warranted, this will be completed either before any scheduled management activity occurs in the tract or within 6 months after the 2012 audit, whichever is sooner.

The following guidelines are currently being incorporated into the DoF state forest procedure manual, to be completed by 2012 audit:

Conservation of Old Growth Stands on State Forests

Old growth forest is defined as (1) the oldest seral stage in which a plant community is capable of existing on a site, given the frequency of natural disturbance events, or (2) a very old example of a stand dominated by long-lived early- or mid-seral species. The onset of old growth varies by forest community and region. In Indiana, remnant old growth forests are typically dominated by long-lived early- or mid-seral species, such as oaks. Depending on the frequency and intensity of past disturbances, and site conditions, old-growth forest will have different structures, species compositions, and age distributions, and functional capacities than younger forests.

Classifications

The DoF recognizes two types of old growth on state forests that are differentiated by the historic occurrence of logging.

- **True Old Growth** (a.k.a. "Type 1 Old Growth"): Three acres or more that have never been logged and display old growth characteristics (see list below). Additionally, a stand of true old growth has no evidence of human-caused understory disturbance (e.g., grazing).
- **Developing Old Growth** (a.k.a. "Type 2 Old Growth"): 20 acres of forest that that have been logged >80 years ago¹ and retain significant old growth structure and functions. Additionally, developing old growth stands have had little or no human-caused understory or groundstory disturbance within previous 80-100 years, depending on site quality². Examples of understory/groundstory disturbance could include, but are not limited to, prescribed fire and grazing.

Characteristics of Old Growth Forests in the Central Hardwood Region

- Mean age of dominant canopy trees >150 years old on mesic sites; ≥175 years old on drier sites.
- All-age stand structure with multi-layered canopy.
- All-age canopy gaps; gaps >7% of forest area.
- 10:1 live to dead tree ratio by size class (≥5" dbh).
- >20 canopy tree species.
- Most dead wood in advanced decay stages, rather than recent mortality with little decay; significant abundance of large diameter dead wood, much of it in advanced stage of decay.

Identification and Designation of Old Growth Areas

1. Candidate stands/sites for old growth designation will be evaluated by a committee appointed by the Chief of State Forests (using the best information available. If a site is found not to be suitable for

¹ >80 years since logging/disturbance on mesic sites; ≥100 years on drier sites with lower productivity.

² 80 years for mesic sites; 100 years on drier sites.

designation, a recommendation for future management of the site will be made by the committee and/or the Chief of State Forests.

2. State forest tracts will be continuously assessed for the presence of old growth and stands with old growth characteristics during the regular tract management guide development process. Candidate stands or sites will be submitted to the DoF Property Specialist who will determine if further evaluation is needed by the old growth assessment committee.
3. The Division Biologist will annually query the Continuous Forest Inventory (CFI) database to identify plots sampled in stands that have canopy trees >150 years old. If a subsequent review of available records indicates the stand is a candidate for old growth designation, it will be submitted to the old growth assessment committee for further evaluation.

Old Growth Management Guidelines

1. State forest stands classified as either true or developing old growth shall be excluded from harvesting and other forms of forest management except when needed to maintain the values associated with the stand (e.g., remove exotic species, conduct prescribed burning, and thinning from below in forest types when and where restoration is appropriate).
2. Permanent forest clearing shall be avoided within 300 feet of a designated old growth area. No regeneration openings (or portions of openings) should occur within 100 feet of an old growth area. Regeneration openings (or portions of openings) >3 acres should be avoided 100-300 feet from old growth areas. All other forest management activities, including single-tree selection harvests, are permissible at any distance from old growth areas.
3. Construction of new roads shall be avoided in designated old growth areas; construction of new roads within 300 feet of old growth areas should also be avoided but if deemed necessary, requires the approval of the DoF Property Specialist. Maintenance of existing roads is permissible if old growth characteristics are maintained in the area. In general, trail development or maintenance is permissible if old growth characteristics are maintained. Consult with DoF Property Specialist on all trail projects in or adjacent to designated old growth areas.

EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM *(please list)*

FME Representative Name and Title
Brenda Huter, Forest Stewardship Coordinator

Date
10/12/2012

TO BE
COMPLETED

SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION
(Describe conclusion in detail)

DoF actions to address to address CAR 2011.4 are sufficient to find conformance with Indicators 6.3.a.1 and 6.3.a.3. With nearly 10,000 acres in late successional, DoF has designated a significant portion of its acres for late successional. DoF has continued to make progress on identifying Type 1 and Type 2 old growth. On October 23, DoF conducted an old growth identification training for all State Forest Property foresters. During future audits, SCS will continue to see how Type 2 old growth is identified and managed over time. Note that DoF's response to Part 2 addresses the requirement of Part 1 that DoF identify underrepresented successional stages outside of RSAs and HCVs.

X CLOSED

UPGRADED TO MAJOR

OTHER DECISION (refer to description above)

| | |
|--|---|
| SCS Representative Name and Title (CAR/OBS reviewer) | Date of Acceptance of Corrective Action |
| Dave Wager, SCS Lead Auditor | 10.19.12 |

Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS

| | | |
|---|--|---|
| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.5 |
| | Select one: | <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicator 6.3.h. |
| NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> DOF has several strategies of invasive species control. Presence of invasive species in each harvest unit is included in each State Forest’s Management Guide (http://www.in.gov/dnr/forestry/3635.htm). DOF cited at least one management guide in which preventative action was described (treating Ailanthus prior to harvest to prevent post-harvest regeneration; http://www.in.gov/dnr/forestry/files/fo-HC_C18_T05_102411.pdf). Most management guides discuss invasive species presence or absence followed by a recommended treatment option. DOF’s invasive species control strategy in the State Forest Management Strategy discusses prevention, but does not provide specific information on preventative actions that minimize the risk of invasive species establishment, growth, and spread. Stakeholder comments received this year, as well as reviews of DOF’s stakeholder comments reveal that both stakeholders and DOF are concerned about the prevention of invasive species and that as recently as 2010 there has been discussion of expanding BMPs with an emphasis on invasive species (see State Forest Management Strategy , published in April 2011). DOF does not have a formal system to monitor the control measures and management practices to assess their effectiveness in preventing or controlling invasive species. While management guides cited by DOF discuss the need to continue monitoring, no specific monitoring activities or parameters are defined for completed control measures. | | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> <ul style="list-style-type: none"> DOF shall devise preventative management practices that minimize the risk of invasive establishment, growth, and spread. DOF shall create a timeline for implementation of these management practices, specifying where more information, research or stakeholder engagement is necessary prior to broad implementation. DOF shall create a monitoring system for control measures and management practices to assess its effectiveness in preventing or controlling invasive species. | | |

| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> | | | | | | | | | | | | | | | | | | | |
|--|---|---|----------------------|----------|--|---|--|---|---|--|---|-------------|--|---------|--|--|---|----------------------|--|--|
| | Describe action taken by the FME to address the root cause of the non-conformity | | | | | | | | | | | | | | | | | | | |
| | <ol style="list-style-type: none"> 1. The Division of Forestry has revised its State Forest procedures manual to address invasive species in a more robust manner , including more specific monitoring and prevention measures 2. The Division of Forestry participates in the ongoing invasive species BMP development project being undertaken by the Southern Indiana Cooperative Weed Management Area. 3. Timeline for implementation established (see below). | | | | | | | | | | | | | | | | | | | |
| | CAR Response Timeline: | | | | | | | | | | | | | | | | | | | |
| | To implement the corrective action the following timeline is presented | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Preventative Measure</th> <th>Timeline</th> </tr> </thead> <tbody> <tr> <td>1- Provide training in identification (and treatment) of locally known invasive plant and pest species</td> <td>Annual invasive species training opportunities will occur</td> </tr> <tr> <td>2- Placement of educational materials at State Forest education centers and trailheads</td> <td>Complete by June 2013. Replace as needed.</td> </tr> <tr> <td>3- Revegetate areas as quickly as feasible after site disturbances- especially where invasive species of concern are a known concern.</td> <td>Implement with spring 2013 planting season</td> </tr> <tr> <td>4- Utilize non-invasive species for seed mixes and plant materials when reseeding disturbed areas</td> <td>Spring 2013</td> </tr> <tr> <td>5- To the extent practical utilize existing roads, skid trails and landings to reduce disturbance.</td> <td>Ongoing</td> </tr> <tr> <td>6- Avoid construction of new management and recreation access systems through areas of known populations of invasive plants without also implementing reasonable measures to control spread of the problem plant</td> <td>After Spring 2013 green-up allows for species identification</td> </tr> <tr> <td>7- Inspect forest regeneration areas 2-4 years after harvest and treat invasive species of concern before they become seed bearing (e.g. Ailanthus)</td> <td>Spring green-up 2013</td> </tr> <tr> <td>8- Participate as a pilot BMP site the Southern Indiana Cooperative Weed Management Area invasive species BMP project.</td> <td>Anticipate BMP development and pilot program to start in fall 2013</td> </tr> </tbody> </table> | | Preventative Measure | Timeline | 1- Provide training in identification (and treatment) of locally known invasive plant and pest species | Annual invasive species training opportunities will occur | 2- Placement of educational materials at State Forest education centers and trailheads | Complete by June 2013. Replace as needed. | 3- Revegetate areas as quickly as feasible after site disturbances- especially where invasive species of concern are a known concern. | Implement with spring 2013 planting season | 4- Utilize non-invasive species for seed mixes and plant materials when reseeding disturbed areas | Spring 2013 | 5- To the extent practical utilize existing roads, skid trails and landings to reduce disturbance. | Ongoing | 6- Avoid construction of new management and recreation access systems through areas of known populations of invasive plants without also implementing reasonable measures to control spread of the problem plant | After Spring 2013 green-up allows for species identification | 7- Inspect forest regeneration areas 2-4 years after harvest and treat invasive species of concern before they become seed bearing (e.g. Ailanthus) | Spring green-up 2013 | 8- Participate as a pilot BMP site the Southern Indiana Cooperative Weed Management Area invasive species BMP project. | Anticipate BMP development and pilot program to start in fall 2013 |
| | Preventative Measure | Timeline | | | | | | | | | | | | | | | | | | |
| | 1- Provide training in identification (and treatment) of locally known invasive plant and pest species | Annual invasive species training opportunities will occur | | | | | | | | | | | | | | | | | | |
| | 2- Placement of educational materials at State Forest education centers and trailheads | Complete by June 2013. Replace as needed. | | | | | | | | | | | | | | | | | | |
| | 3- Revegetate areas as quickly as feasible after site disturbances- especially where invasive species of concern are a known concern. | Implement with spring 2013 planting season | | | | | | | | | | | | | | | | | | |
| 4- Utilize non-invasive species for seed mixes and plant materials when reseeding disturbed areas | Spring 2013 | | | | | | | | | | | | | | | | | | | |
| 5- To the extent practical utilize existing roads, skid trails and landings to reduce disturbance. | Ongoing | | | | | | | | | | | | | | | | | | | |
| 6- Avoid construction of new management and recreation access systems through areas of known populations of invasive plants without also implementing reasonable measures to control spread of the problem plant | After Spring 2013 green-up allows for species identification | | | | | | | | | | | | | | | | | | | |
| 7- Inspect forest regeneration areas 2-4 years after harvest and treat invasive species of concern before they become seed bearing (e.g. Ailanthus) | Spring green-up 2013 | | | | | | | | | | | | | | | | | | | |
| 8- Participate as a pilot BMP site the Southern Indiana Cooperative Weed Management Area invasive species BMP project. | Anticipate BMP development and pilot program to start in fall 2013 | | | | | | | | | | | | | | | | | | | |
| EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> | | | | | | | | | | | | | | | | | | | | |
| <ol style="list-style-type: none"> 1. State Forest Procedure Manual Section W: Pest and Invasive Species Management with Appendix of recommended seeding mixtures(CAR 2011.5 State Forest Procedure Manual Section W.doc) 2. Invasive Plant Advisory Committee Invasive Species Best Management Practices (CAR 2011.5 Invasive Species BMPs.doc) | | | | | | | | | | | | | | | | | | | | |
| FME Representative Name and Title | Date | | | | | | | | | | | | | | | | | | | |
| Brenda Huter, Forest Stewardship Coordinator | 10/12/2012 | | | | | | | | | | | | | | | | | | | |
| TO BE COMPLETED BY SCS | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION | | | | | | | | | | | | | | | | | | | |
| | <i>(Describe conclusion in detail)</i> | | | | | | | | | | | | | | | | | | | |

As described above DoF has taken the requested action to address this non-conformance.

CLOSED

UPGRADED TO MAJOR

OTHER DECISION (refer to description above)

| SCS Representative Name and Title (CAR/OBS reviewer) | Date of Acceptance of Corrective Action |
|--|---|
| Dave Wager, SCS Lead Auditor | 10.19.12 |

Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS

| | | |
|--|--|---|
| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.6 |
| | Select one: | <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicator 6.4.b and 6.4.e. |
| NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> <ul style="list-style-type: none"> Currently, only half of the State Forests have been surveyed for the presence of RSAs identified in the GAP analysis. 6.4.b requires that where existing areas within the landscape, but external to the FMU, are not of adequate protection, size, and configuration to serve as representative samples of existing ecosystems, forest owners or managers, whose properties are conducive to the establishment of such areas, designate ecologically viable RSAs to serve these purposes. DOF has not identified any potential RSAs that may be sufficient in size to maintain species dependent on interior core habitats. Note that FSC US has not defined what constitutes a large, contiguous public forest nor interior core habitat. | | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> <ul style="list-style-type: none"> DOF shall complete its RSA designation process and identify potential RSAs that may be sufficient in size to maintain species dependent on interior core habitats. | | |

IMPLEMENTED CORRECTIVE ACTION (*Response to Observations is optional*)

Describe action taken by the FME to address the root cause of the non-conformity

DoF Response: Requested Corrective Action #1: In 2008, DoF worked with Division of Nature Preserves to complete a community gap analysis in natural region sections that contain state forests. This analysis included all state forests and considered the natural communities that were expected to be found in each natural region section and whether protected samples existed and to what extent. Further coordination with DNP personnel developed a listing of known sites on state forests that would be further evaluated to serve as RSAs. All state forests were considered during this process, not “half”, as was stated in the non-conformity. To maximize the efficiency and effectiveness of this evaluation, high priority sites were assessed first, which included examples of communities where < 5 sites were well-protected on the landscape. Table 1 shows the current status of highest priority known candidate sites. Table 2 shows the current status of the lowest priority known candidate sites.

In 2009, DoF identified a continuous, on-going process to identify natural communities on state forests to serve as future candidate RSAs, where needed. A description of this process was included in the DoF response to CAR 2008.1 and addressed during the 2009 surveillance audit. DoF field personnel from all state forests received training on RSA surveys during a 2009 property section meeting and instructed on this process. The attached guidance titled “Establishment and Management of Representative Sample Areas on State Forests” was drafted in 2012 to formalize and provide further details on this process. This guidance will be included in the state forest procedure manual, and state forest personnel will be trained in these procedures. Table 3 shows the 12 remaining community gaps that are being targeted during the continuous RSA candidate assessment process.

DoF Response: Requested Corrective Action #2

Potential interior forest core habitats currently being considered for RSA designation:

- Morgan-Monroe/Yellowwood Backcountry Area
- Jackson-Washington Backcountry Area
- Clark Backcountry Area
- HEE control areas
- Brown County State Park (or 10 o'clock nature preserve)
- Deam Wilderness Area
- O'Bannon Woods State Park

All of these candidate areas are within large, contiguous public forest units and are currently designated as areas managed/designated for late-successional, mature forest conditions. DoF definition of this RSA can be found in the attached guidance titled “*Establishment and Management of Representative Sample Areas on State Forests*”. This guidance will be included in the state forest procedure manual, and state forest personnel will be trained in these procedures. These candidate areas are currently under evaluation by DoF; we intend to designate interior forest core RSAs prior to the next surveillance audit.

EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM (*please list*)

- Tables 1, 2, & 3 candidate RSA sites and natural community gaps (CAR 2011.6 RSA tables 10-11-2012.doc)
- RSA process: Establishment and Management of RSAs on State Forests (CAR 2011.6 RSA Establishment & Management 10-11-2012.doc)

TO BE COMPLETED BY FME

| | | |
|--|---|---|
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/12/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | <p>SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i></p> <p>Based on the additional information provided in this CAR response, the SCS auditor concludes that there is conformance with 6.4.b. and 6.4.e.</p> <p>X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above)</p> | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.7 |
| | Select one: | <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicators 6.5.a and 6.5.e.1. |
| | NON-CONFORMITY (or Background/ Justification in the case of Observations) (Describe and provide objective evidence) | |
| | <p>The following are excerpted guidelines from DOF's Riparian Management Zone (RMZ) BMPs (http://www.in.gov/dnr/forestry/2865.htm):</p> <ul style="list-style-type: none"> • Minimize mechanical disturbance to the forest floor by using directional felling away from the watercourse and winching to skid trails outside an RMZ when necessary. • Do not pile slash, fill or place debris within these areas. • Remove felled tops and logging debris from the channels of perennial and large intermittent streams. • Place felled tops and debris a sufficient distance away from the water course to prevent flood impediments. • Protect the forest floor to allow sediment to be filtered out before reaching the watercourse. • Divert forest road and skid trail runoff onto stable areas before it enters the RMZ. • Stabilize all roads, skid trails, cuts and fills in the RMZ as soon as practicable after construction and use. <p>During the recertification assessment, the audit team noted use of a tree top in one unregulated, small intermittent stream. The rationale for the use of the top was acceptable given the size of the intermittent stream and that it was being used to stop sediment from a temporary skid trail. While it decays, the top may have additional short-term benefits for birds and amphibians as cover. DOF's RMZ guidelines could be confusing to managers and outside stakeholders, however, as it recommends directional felling away from the RMZ when necessary, placing slash outside of RMZs, and removing tops/ logging debris from the channels of large intermittent streams, and placing tops far enough away from a water course to prevent flood impediments. See the stakeholder comments for how these same guidelines can be used to support one of DOF's field-level decisions; woody debris is compatible with the protection of small intermittent streams in certain cases. What qualifies as a small or large intermittent stream as stated in the RMZ BMPs?</p> | |
| REQUESTED CORRECTIVE ACTION (or Observation) | | |
| <ul style="list-style-type: none"> • DOF should consider modifying its RMZ guidelines to address situations in which tops, slash and other woody debris may be used, as well as any precautions necessary when using woody debris in the RMZ. | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity This observation was reviewed along with the public comments and SCS response comments. The Division of Forestry has an ongoing program to monitor the implementation and effectiveness of BMPs installed on State Forest lands. When major departures are observed it is standard practice to notify the property staff of the departure and the mitigation steps required. This process serves to reinforce our commitments to BMPs, educates and trains staff on BMP requirements and require remedial action where appropriate. The trained BMP monitors also suggest where BMP modifications may be appropriate. No changes to RMZ guidelines have been identified as being necessary. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> IN DNR Division of Forestry State Forest 1996-2011 BMP Monitoring Results (OBS 2011.7 State Forest BMP Monitoring Results .pdf) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/5/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> DoF considered the Observation and determined that no changes were necessary to the BMP's at this time. | |
| | X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.8 |
| | Select one: | <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicators 6.6.b, 6.6.d and 6.6.e. |
| NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> <ul style="list-style-type: none"> • Criterion 6.6 has several indicators that are new to the FSC-US standard and require more documentation and robust monitoring procedures. • DOF does not have written strategies that justify the use of chemical pesticides and an eventual phase-out of chemical use, if feasible. The written strategy shall include an analysis of options for, and the effects of, various chemical and non-chemical pest control strategies, with the goal of reducing or eliminating chemical use. DOF could not present evidence of alternative control measures being explored or that have been explored. • DOF's chemical prescriptions do not describe any site-specific hazards and environmental risks, such as sensitive areas or any safety precautions. It warrants mention that State field workers are licensed applicators and follow MSDS and chemical label requirements. • DOF does not formally monitor the effects of chemical application for use in adaptive management. | | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> <ul style="list-style-type: none"> • DOF shall prepare written strategies that justify the use of chemical pesticides and an eventual phase-out of chemical use, if feasible. The written strategy shall include an analysis of options for, and the effects of, various chemical and non-chemical pest control strategies, with the goal of reducing or eliminating chemical use. • DOF's chemical prescriptions shall describe any site-specific hazards and environmental risks, such as sensitive areas or any safety precautions. • DOF shall monitor the effects of chemical application and use the results in the creation and implementation of adaptive management strategies. | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity DoF has revised policies and procedures related to chemical use on State Forests to clarify and more fully incorporate integrated pest management strategies. DoF has revised its standard pesticide use record sheet to include notes on effectiveness of treatment. These records are sent annually to the Forest Properties Specialist for review and chemical use reporting to certifying bodies. DoF has developed and distributed a summary of chemical and non-chemical prescriptions for State Forest resource managers. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> <ol style="list-style-type: none"> 1. Integrated Pest Management on Indiana State Forest Properties (CAR 2011.8 IPM Plan on Indiana State Forests.doc) 2. Pesticide Application Record (CAR 2011.8 Pesticide Application Record.xls) 3. Herbicide Use Instructions (CAR 2011.8 Herbicide Use Instructions.xls) 4. General Guidelines for Herbicide Use (CAR 2011.8 General Guidelines for Herbicide Use.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/3/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> SCS auditor reviewed the above information and determined that the CAR has been met. x CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| | <i>Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS</i> | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.9 | |
| | Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation | | |
| | FMU CAR/OBS issued to (when more than one FMU) | | |
| | Deadline for Corrective Action by FME | | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | | |
| | Standard and Requirement Reference | FSC US indicator 6.9.b. | |
| NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> DOF uses exotic species (e.g., wheat, annual rye, etc) in some cases for erosion control along road sides and in landings. DOF has not documented the provenance of exotic species, such as fescue. | | | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> DOF shall document the district of origin of exotic species used for management purposes such as erosion control. | | | |

| | | |
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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity DoF shall note seeding mixtures and plant materials utilized in the corresponding tract file or central property record. A new web based management plan system is under development which is expected to be fully implemented in 2013. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> State Forest Procedure Manual Section W: Pest and Invasive Species Management with Appendix of recommended seeding mixtures (CAR 2011.5 State Forest Procedure Manual Section W.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/12/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> SCS auditor confirmed that the web based management plan system will have a required field to note seeding mixtures. SCS auditor also confirmed that this process has been added to the State Forest Procedures. | |
| | X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.10 |
| | Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation | |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicators 7.1.c, 7.1.h, 7.1.j, and 7.1.n. |
| | NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> <ul style="list-style-type: none"> 7.1.c. DOF does not have a documented link with desired future conditions (b) to applicable management objectives and activities to move the FMU towards desired future conditions (d). 7.1.h. The FMP does not describe how the management system conforms to Criterion 6.6. 7.1.j. The FMP does not incorporate the results of the evaluations of social impacts. This is a new requirement in the FSC US standard. 7.1.n. The FMP does not include a description of monitoring procedures necessary to address the social impacts monitoring requirements of Criterion 8.2 (see 8.2.d.3-5 for more information). This is a new requirement in the FSC US standard. | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> DOF shall address in the FMP: <ul style="list-style-type: none"> 7.1.c. Link with desired future conditions to applicable management objectives and activities to move the FMU towards desired future conditions (see also 7.1.q). 7.1.h. Description of how the management system conforms to Criterion 6.6. 7.1.j. Incorporation of the results of the evaluations of social impacts (see all cross-referenced Criteria and Indicators). 7.1.n. Description of social impacts monitoring procedures necessary to address the requirements of Criterion 8.2 (see 8.2.d.3-5 for more information). | | |

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| TO BE COMPLETED BY FME | <p>IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i></p> <p>Describe action taken by the FME to address the root cause of the non-conformity</p> <p>7.1.c. Desired future condition statements are nested within several sections of the State Forest procedures manual, the Indiana State Forest Environmental Assessment and within tract management guides. The DoF's IFRMS project now underway is redesigning the format for tract management guides. This project is an extensive redesign of site level planning and includes a web based system and improved public access to planning documents. Draft format will be tested in 2012 and implemented in 2013. This project will institutionalize the inclusion of a 'desired future condition' discussion on tract level management guides.</p> <p><input type="checkbox"/> 7.1.h. The State Forest procedures manual was updated to include a new/revised section on the use of chemicals. The new section was conveyed to the property foresters at the September 19, 2012 State Forest Section meeting. Effective January 1, 2013 the new format to record chemical use at property level replaces the old format.</p> <p><input type="checkbox"/> 7.1.j. and 7.1.n. See response to CAR 2011.3</p> | |
| | <p>EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i></p> <ul style="list-style-type: none"> • CAR response 2011.3 • Draft Indiana Forest Resource Management System (INFRMS) plan format (CFM) (available at the audit) • State Forest Procedures Manual (available at the audit) • Indiana State Forests Environmental Assessment (available at the audit) | |
| <p>FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator</p> | | <p>Date 10/12/2012</p> |
| TO BE COMPLETED BY SCS REPRESENTATIVE | <p>SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION</p> <p><i>(Describe conclusion in detail)</i></p> <p>SCS auditor reviewed Environmental Assessment, Procedures Manual, and received a description of INFRMS. SCS auditor also reviewed several Tract plans during the audit. The collection of documents comprising the management plan now provide a link to desired future conditions; description of how the management system conforms to Criterion 6.6; incorporation of the results of the evaluations of social impacts (see all cross-referenced Criteria and Indicators); description of social impacts monitoring procedures necessary to address the requirements of Criterion 8.2 (see 8.2.d.3-5 for more information).</p> <p>X CLOSED</p> <p style="padding-left: 40px;">UPGRADED TO MAJOR</p> <p style="padding-left: 40px;">OTHER DECISION (refer to description above)</p> | |
| | <p>SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor</p> | |
| <p><i>Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS</i></p> | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | | 2011.11 |
| | Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation | | |
| | FMU CAR/OBS issued to (when more than one FMU) | | |
| | Deadline for Corrective Action by FME | | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | | |
| | Standard and Requirement Reference | | FSC US indicator 8.2.d.3. |
| NON-CONFORMITY (or Background/ Justification in the case of Observations) (Describe and provide objective evidence) DOF participates in social/community programs, but does not have a formal system to monitor relevant socio-economic issues as detailed in 8.2.d.3. This is a new requirement in the FSC US standard. Please not the cross-referenced indicators. | | | |
| REQUESTED CORRECTIVE ACTION (or Observation) DOF shall create a system to monitor relevant socio-economic issues (see Indicator 4.4.a), including the social impacts of harvesting, participation in local economic opportunities (see Indicator 4.1.g), the creation and/or maintenance of quality job opportunities (see Indicator 4.1.b), and local purchasing opportunities (see Indicator 4.1.e). | | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity The Division of Forestry reviewed the ways socio-economic issues are monitored in Indiana for internal and external to the Division. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> Summary and Monitoring of Social Impacts of State Forest Management Activities (CAR 2011.3 2011.11 Summary and Monitoring of Social Impacts.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/3/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> Description of Summary and Monitoring of Social Impacts is sufficient to fulfill Indicator 8.2.d.3. The summary is included as Appendix 9 to the 2012 surveillance report. | |
| | x CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.12 |
| | <i>Select one:</i> | <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicator 9.1.a. |
| | NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> | |
| | <p>DOF has not classified its HCV areas by the designated HCV types as described in FSC-US Standard Appendix F.</p> <p>DOF has not updated its HCV procedures in response to updates to the FSC US standard. For example, guidance referenced in the FSC-US FM Standard (data sources listed after 9.1.a and the process outlined in the FSC-US Assessment Framework) in some cases is more explicit than in the regional standard and could result in additional areas identified as HCVF in some cases and on some FMUs (for example, HCV 4, HCV5, and HCV6). Furthermore, FSC-US has provided definitions that may help to guide the HCV assessment. For example, definitions are provided for ‘critical’ and ‘significant’ among others. Moreover, as DOF’s HCV classification process remains open due per its management policy, it is important the DOF’s procedures be in line with new guidance from FSC-US. DOF should also consider the timeline and review process it described during discussions with the audit team (see also 9.2.b).</p> <p>Evidence examined: HighConservationValueForests.042910.doc</p> <ul style="list-style-type: none"> • “Management of HCVF will be directed toward maintenance or improvement of the condition for which the HCVF was designated. Management of these initial HCVF is primarily under the direction of the Division of Nature Preserves; the Division of Forestry may assist in their management when resources allow.” • “The Division of Forestry intends to continue to cooperate with the Division of Nature Preserves in the identification and dedication of additional nature preserves. The Division of Forestry proposes to automatically designate each new nature preserve on state forest land as a HCVF.” | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> | | |
| <ul style="list-style-type: none"> • DOF shall classify its HCV areas by the six (6) designation HCV types. • DOF shall update its HCV procedure to contemplate all HCV requirements, including classification, consultation, measures to maintain/ enhance identified HCVs, and monitoring. | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity The Division of Forestry has Classified it HCV areas by the six types and has updated it's HCV procedure. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> State Forest Certification High Conservation Value Forest (CAR 2011.12 2011.14 2011.15 OBS 2011.13 HCVF.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10-12-2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> DoF's updated HCVF documents address Indicator 9.1.a. See State HCVF description in Appendix 10 of the 2012 FSC Surveillance Audit Report. | |
| | X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.13 |
| | Select one: | <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicator 9.2.b. |
| | NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> | |
| | <p>In developing the assessment, DOF and Nature Preserves consult with qualified specialists, independent experts, and local community members who may have knowledge of areas that meet the definition of HCVs. It is clear for HCVs under Nature Preserves' jurisdiction that other experts, such as local landtrusts and The Nature Conservancy, have been consulted in the development of the HCV process. Stakeholder comments received also confirm that DOF has consulted with experts outside of Nature Preserves. In its HCV write-up, DOF explains one situation in how public comments were considered in the classification. For other HCVs, there is no reference to how information from stakeholder consultations and other public review has been integrated into HCVF descriptions, delineations and management.</p> <p>DOF should also consider the timeline and review process it described during discussions with the audit team. Potential HCV sites that have been nominated for review must undergo a public review process that involves outside stakeholders, Nature Preserves, DOF, and the Natural Resources Commission. At the end of the HCV classification process, identified HCV either fall under the jurisdiction of DOF or Nature Preserves. This process appears to be particularly difficult for some stakeholders to grasp as information is made available in multiple places.</p> <p>Evidence examined: HighConservationValueForests.042910.doc and stakeholder comments.</p> | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> | | |
| <ul style="list-style-type: none"> • DOF should consider adding a section to each classified HCV on how public comments were considered and/or incorporated into HCVF descriptions, delineations and management to maintain/ enhance identified HCVs. • DOF should include, or provide publically available reference to, the review process it described to the audit team in its HCV procedures, such as the stages when various divisions and outside stakeholders are involved and which division ends up with responsibility for the identified HCV type. | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity The Division of Forestry has added a section to each classified HCVF on how public comments were considered. The Division will post HCVF information on the Division of Forestry website including information on the division with the responsibility for the HCVF after the certification auditors confirm that the HCVF process developed meets FSC requirements. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> State Forest Certification High Conservation Value Forest (CAR 2011.12 2011.14 2011.15 OBS 2011.13 HCVF.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/12/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> DoF's updated HCVF documents address Indicator 9.2.b. See State HCVF description in Appendix 10 of the 2012 FSC Surveillance Audit Report. | |
| | x CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| CAR/OBS Number (e.g. 1, 2, ...) | 2011.14 |
| Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation | |
| FMU CAR/OBS issued to (when more than one FMU) | |
| Deadline for Corrective Action by FME <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| Standard and Requirement Reference | FSC US indicator 9.3.a. |
| NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> <p>In relation to HCV procedures (see 9.1.a), another procedural issue that DOF has not rectified is how it is to implement the measures to maintain and/or enhance identified HCVs that do not fall under the jurisdiction of Nature Preserves due to the possibility of them not being in line with Nature Preserves' mission.</p> <p>According to HighConservationValueForests.042910.doc : "Management of HCVF will be directed toward maintenance or improvement of the condition for which the HCVF was designated." This is broadly applied to all six (6) HCV types on DOF (see CAR for 9.1.a on HCV type classification), which may or may not be appropriate depending on the identified HCV. It warrants mention that DOF has described measures to maintain and/or enhance identified HCVs specifically for Harrison-Crawford State Forest (i.e., prescribed burns are permitted as they maintain/ enhance HCVs) and that these measures are appropriate to the identified ecosystems' historical disturbance regimes.</p> <p>However, not all identified HCVF areas' have descriptions in the management plan/ operational plans of the measures necessary to ensure the maintenance and/or enhancement of all high conservation values present in all identified HCVF areas, including the precautions required to avoid risks or impacts to such values (see Principle 7). For example, the Clark, Jackson-Washington, and Morgan-Monroe State Forest HCVs have information on why it was designated as HCV, but there are no specific measures to maintain and/or enhance the identified HCVs described.</p> | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> <ul style="list-style-type: none"> • DOF shall define which HCVs are assigned to itself and any other division, including the responsibilities for implementing the measures to maintain and/or enhance identified HCVs. • Upon classifying HCVs by the six (6) recognized types, DOF shall add to its HCV procedures a step to include a description of the measures to maintain and/or enhance identified HCVs in the management plan. | |

TO BE COMPLETED BY SCS REPRESENTATIVE

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity The Division of Forestry has determined which divisions will have management responsibility of each of the HCVF. In addition a description of the management measures to maintain and/or enhance the HCVF have been added for each HCVF. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> State Forest Certification High Conservation Value Forest (CAR 2011.12 2011.14 2011.15 OBS 2011.13 HCVF.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/12/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> DoF's updated HCVF documents address Indicator 9.3.a. See State HCVF description in Appendix 10 of the 2012 FSC Surveillance Audit Report. | |
| | X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.15 |
| | Select one: | <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> Other deadline (specify): | |
| | Standard and Requirement Reference | FSC US indicator 9.4.a. |
| NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> Some responsibilities for HCV management have been delegated to Nature Preserves, but others have not been assigned in HCV procedures, including monitoring. Nature Preserves does monitor the classified HCVs, but potential HCVs that fall outside of its jurisdiction have not been defined yet. The updated FSC-US standard expects for the HCV monitoring program to be designed and implemented consistent with the requirements of Principle 8. | | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> <ul style="list-style-type: none"> DOF shall define and assign the responsibilities for monitoring of the status of identified HCV types and their attributes, including the effectiveness of the measures employed for their maintenance or enhancement. | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity The Division of Forestry has assigned responsibilities for monitoring of HCVFs. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> State Forest Certification High Conservation Value Forest (CAR 2011.12 2011.14 2011.15 OBS 2011.13 HCVF.doc) | |
| | FME Representative Name and Title Brenda Huter, Forest Stewardship Coordinator | Date 10/12/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> DoF's updated HCVF documents address Indicator 9.4.a. Monitoring is the responsibility of Nature Preserves. See State HCVF description in Appendix 10 of the 2012 FSC Surveillance Audit Report. | |
| | X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Dave Wager, SCS Lead Auditor | Date of Acceptance of Corrective Action 10.19.12 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

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| TO BE COMPLETED BY SCS REPRESENTATIVE | CAR/OBS Number (e.g. 1, 2, ...) | 2011.16 |
| | Select one: | <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation |
| | FMU CAR/OBS issued to (when more than one FMU) | |
| | Deadline for Corrective Action by FME | |
| | <input type="checkbox"/> 3 months from above Date of Issuance <input type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Pre-condition to certification <input checked="" type="checkbox"/> Other deadline (specify): June 1, 2012 | |
| | Standard and Requirement Reference | SCS COC Indicators for FMEs 1.6 |
| NON-CONFORMITY <i>(or Background/ Justification in the case of Observations)</i> <i>(Describe and provide objective evidence)</i> <ul style="list-style-type: none"> • DOF has not updated its logos to the new trademark requirements. • FSC has changed the claim from "FSC Pure" to "FSC 100%." | | |
| REQUESTED CORRECTIVE ACTION <i>(or Observation)</i> <ul style="list-style-type: none"> • DOF shall update its FSC logos/trademarks in conformance to the latest trademark standard and obtain approval for use from SCS. • DOF shall update its product claim in invoices/ timber sale documentation (including any website references) to "FSC 100%." | | |

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| TO BE COMPLETED BY FME | IMPLEMENTED CORRECTIVE ACTION <i>(Response to Observations is optional)</i> Describe action taken by the FME to address the root cause of the non-conformity All FSC logos were removed from the State Forest timber sale notice and contract. The claim has been updated to FSC 100%. All future FSC logo use will be in conformance to the latest trademark standard and will obtain approval for use from SCS. | |
| | EVIDENCE OF CONFORMANCE SUBMITTED WITH THIS FORM <i>(please list)</i> Attached evidence: Timber Sale Agreement Revised.doc Sale Notice Revised. doc | |
| | FME Representative Name and Title Brenda Huter | Date 6/1/2012 |
| TO BE COMPLETED BY SCS REPRESENTATIVE | SCS REVIEW / ACCEPTANCE OF CORRECTIVE ACTION <i>(Describe conclusion in detail)</i> All FSC logos have been removed as stated from the documents included in the response. The certificate codes and claims are correct in all documents. | |
| | X CLOSED UPGRADED TO MAJOR OTHER DECISION (refer to description above) | |
| | SCS Representative Name and Title (CAR/OBS reviewer) Kyle Meister | Date of Acceptance of Corrective Action June 5, 2012 |
| Press Enter twice below table to leave a space, then copy and paste table below for each CAR/OBS | | |

4.2 New Corrective Action Requests and Observations

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| Finding Number: 2012.1 | |
| Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation | |
| FMU CAR/OBS issued to (when more than one FMU): | |
| Deadline | <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify): |
| FSC Indicator: | 4.4.a |
| <p>Non-Conformity: DoF lacks a clear consistent approach for recording comments at open houses and tracking other complaints that are received at a state forest property. During the 2012 audit SCS observed differing approaches for tracking comments, and Clark State Forest did not have any records of stakeholder comments. The reason provided for not having any comments from the open house was that they had not received any comments.</p> | |
| <p>Corrective Action Request: DoF should clarify the approach that state forest properties use to record comments at open houses and for recording and tracking any complaints that are received.</p> | |
| FME response <i>(including any evidence submitted)</i> | |
| SCS review | |
| Status of CAR: | <input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> Other decision (refer to description above) |

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| Finding Number: 2012.2 | |
| Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation | |
| FMU CAR/OBS issued to (when more than one FMU): | |
| Deadline | <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify): |
| FSC Indicator: | 5.3.b |
| <p>Non-Conformity: Areas of the Clark State Forest salvage (within blocks 1 and 3) harvest could have been managed better to protect residual trees and avoid erosion. SCS auditor observed significant areas of exposed soil, some residual stand damage, and slopes missing water bars. The SCS auditor realizes the difficulty and dangers of operating in a post tornado disturbance and also noted that BMP implementation was effective in all areas visited during the 2012 audit with the exception of this salvage unit, and further</p> | |

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| that BMP implementation (skid trail closeout) was still ongoing in these areas. | |
| Corrective Action Request: DoF should take steps to ensure that BMPs are closely followed during salvage operations. | |
| FME response <i>(including any evidence submitted)</i> | |
| SCS review | |
| Status of CAR: | <input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> Other decision (refer to description above) |

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| Finding Number: 2012.3 | |
| Select one: <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation | |
| FMU CAR/OBS issued to (when more than one FMU): | |
| Deadline | <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify): |
| FSC Indicator: | 6.3.g.1 |
| <p>Non-Conformity: Although DoF has existing structural retention guidelines for State Forest, the 2012 tornado salvage on Clark State Forest included a large even-aged management prescription that did not include a specific prescription for retaining live trees and other native vegetation within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime. The salvage included a severe impact zone of 600 acres where harvesting contractors were allowed to take all trees. Post tornado damage (pre-harvest) aerial photographs showed that even in the severe impact zone there were still some small standing patches where some characteristic green tree retention should have been left. Some retention was left as there were non-merchantable trees left standing and areas that were inaccessible due to topography or other limitations. However, this retention was not designed in conformance with 6.3.g.1.</p> | |
| <p>Corrective Action Request: DoF must revise existing structural retention guidelines applicable to even-age harvests to include salvage harvests, and must implement revised procedures for even-age and salvage harvests that ensure conformance with 6.3.g.1.</p> | |
| FME response <i>(including any evidence submitted)</i> | |
| SCS review | |

| | |
|---|--|
| Status of CAR: | <input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> <i>Other decision (refer to description above)</i> |
| Finding Number: 2012.4 | |
| Select one: | <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation |
| FMU CAR/OBS issued to (when more than one FMU): | |
| Deadline | <input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify): |
| FSC Indicator: | 4.4.d. |
| Non-Conformity: DoF is in discussion with an aggregate company about a land exchange on the Harrison Crawford State Forest. To-date there have not been any public consultation regarding this potential exchange. Indicator 4.4.d requires that public notification be sufficient to allow interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management. | |
| Corrective Action Request: Beginning with the pending exchange on Harrison Crawford, DoF should ensure that there is a public review process for land exchanges. | |
| FME response <i>(including any evidence submitted)</i> | |
| SCS review | |
| Status of CAR: | <input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> <i>Other decision (refer to description above)</i> |

5.0 STAKEHOLDER COMMENTS

In accordance with SCS protocols, consultation with key stakeholders is an integral component of the evaluation process. Stakeholder consultation takes place prior to, concurrent with, and following field evaluations. Distinct purposes of such consultation include:

1. To solicit input from affected parties as to the strengths and weaknesses of the FME’s management, relative to the standard, and the nature of the interaction between the company and the surrounding communities.
2. To solicit input on whether the forest management operation has consulted with stakeholders regarding identifying any high conservation value forests (HCVFs).

Principal stakeholder groups are identified based upon results from the pre-evaluation (if one was conducted), lists of stakeholders from the FME under evaluation, and additional stakeholder contacts from other sources (e.g., chair of the regional FSC working group). The following types of groups and individuals were determined to be principal stakeholders in this evaluation:

5.1 Stakeholder Groups Consulted

| | |
|---------------|---------------------|
| DoF employees | Logging contractors |
|---------------|---------------------|

Stakeholder consultation activities are organized to give participants the opportunity to provide comments according to general categories of interest based on the three FSC chambers, as well as the SCS Interim Standard, if one was used. The table below summarizes the major comments received from stakeholders and the assessment team’s response. Where a stakeholder comment has triggered a subsequent investigation during the evaluation, the corresponding follow-up action and conclusions from SCS are noted below.

5.2 Summary of Stakeholder Comments and Responses from the Team, Where Applicable

| | |
|--|-------------------------------------|
| FME has not received any stakeholder comments from interested parties as a result of stakeholder outreach activities during this annual audit. | <input checked="" type="checkbox"/> |
|--|-------------------------------------|

6.0 CERTIFICATION DECISION

| | |
|--|---|
| The certificate holder has demonstrated continued overall conformance to the applicable Forest Stewardship standards. The SCS annual audit team recommends that the certificate be sustained, subject to subsequent annual audits and the FME’s response to any open CARs. | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Comments: No additional comments. | |

7.0 CHANGES IN CERTIFICATION SCOPE

There were no changes in the scope of the certification in the previous year.

8.0 ANNUAL DATA UPDATE

8.1 Social Information

| | | |
|---|-------------------------------|-----------------|
| Number of forest workers (including contractors) working in forest within scope of certificate (differentiated by gender): | | |
| # of male workers 145 | # of female workers 41 | |
| Number of accidents in forest work since last audit | Serious: 2 | Fatal: 0 |

8.2 Annual Summary of Pesticide and Other Chemical Use

| Commercial name of | Active ingredient | Quantity applied | Size of area treated | Reason for use |
|--------------------|-------------------|------------------|----------------------|----------------|
|--------------------|-------------------|------------------|----------------------|----------------|

| pesticide/ herbicide | | annually (kg or lbs) | during previous year | |
|--|--|-----------------------------|-------------------------|--|
| Navigate | 2,4 D (butoxyethyl ester) | 100 lbs | 1 | Invasive species control (yellow heart) |
| Opensight | aminopyralid metsulfuron methyl | 6.6 oz | 35 acres | Invasive species control (multiflora rose) |
| Citrine Plus, Citrine Ultra | copper | 272.5 gallons | 179 acres | Algae control |
| Nautique | copper ethylenediamine, copper triethanolamine complex | 225 gallons ; 200 lbs | 105 acres | Aquatic weed control |
| Aquathol K | dipotassium salt of endothal | 55 gallons | 87.5 acres | Aquatic weed control |
| Glyphosate, Roundup, Aquapro, Credit, Imitator +, Razor, Razor Pro, Rodeo | glyphosate | 229.5 gallons | 1,199 acres | Tree planting, invasive species control (multiflora rose, bush honeysuckle), poison ivy treatment, aquatic weed control |
| Stalker | imazapyr | 2.5 gallons | 23 | Invasive species control (ailanthus) |
| Pathway | picloram | 4.0 gallons | 186.1 acres | Cut stump application for trees, post harvest TSI |
| Tordon RTU | picloram , 2,4-D | 12.5 gallons | 561 acres | TSI grapevines, post harvest TSI and invasive species treatment (ailanthus, corktree) |
| Poast | sethoxydim | 20.25 gallons | 220 acres | Invasive species control (stiltgrass) |
| Oust | sulfometuron methyl | .1 gallons | 8 acres | Tree planting |
| Ag-200 /Garlon4/Stalker | triclopyr and imazapyr | 0.7 gallons | 137 acres | Post harvest TSI |
| Garlon 3, Garlon 4, Garlon 4A, Crossbow, Element 3, Element 4 | triclopyr | 144 gallons | 1,678 acres | Invasive species control (bush honey suckle, autumn olive, ailanthus, corktree), TSI grape vine control, post harvest TSI, tree planting site prep |

SECTION B – APPENDICES (CONFIDENTIAL)

Appendix 1 – List of FMUs Selected For Evaluation

- FME consists of a single FMU
 FME consists of multiple FMUs or is a Group

Appendix 2 – Evaluation of Management Systems

SCS conducted the audit from October 17-19, 2012 with an audit team comprised of Dave Wager (lead auditor) and Norman Boatwright (team forester). The process included the assembly and review of audit evidence consisting of documents, interviews, and on-site inspections of ongoing or completed forest practices. Documents describing these activities and lists of management activities were provided to the auditors during the audit, and a sample of the available field sites was selected by the audit team for review. The selection of field sites for inspection was based upon the risk of environmental impact, special features, past non-conformances/observations, and other factors. During the audit, the audit team reviewed a sample of the available written documentation as objective evidence of FSC conformance. Documents that were reviewed during this audit included management plans, procedures, timber sale inspection forms, chemical use records, responses to corrective action requests, among other policies, procedures and records.

The audit team used a consensus approach to determine whether or not there was conformance with each of the indicators being assessed during this audit. The audit team also selected and interviewed contract loggers, DoF employees, and other stakeholders to assess conformance with the FSC standards.

Appendix 3 – List of Stakeholders Consulted

List of FME Staff Consulted

| Name | Title | Consultation method |
|------------------|--|---------------------|
| Dan Ernst | Assistant State Forester | Field meeting |
| John Friedrich | Property Specialist | Field meeting |
| Brenda Huter | Forest Stewardship Coordinator | Field meeting |
| Scott Haulton | Forestry Wildlife Specialist | Field meeting |
| John Seifert | State Forester | Field meeting |
| AJ Ariens | Forestry Archeologist | Field meeting |
| Jim Allen | Morgan Monroe State Forest-Property Manager | Field meeting |
| Dave Ramey | Resource Specialist, Morgan-Monroe Forest | Field meeting |
| David Vadas | Resource Supervisor, Morgan-Monroe Forest | Field meeting |
| Phil Jones | Resource Specialist, Morgan-Monroe State Forest | Field meeting |
| Joshua Kush | Assistant Property Manager, Morgan-Monroe State Forest | Field meeting |
| Amanda Smith | Forest Intern, Morgan-Monroe State Forest | Field meeting |
| Amy Spalding | Resource Specialist, Yellowwood State Forest | Field Meeting |
| Christine Martin | Resource Specialist Clark State Forest | Field meeting |
| Pat Cleary | Property Manager, Clark State Forest | Field Meeting |

| | | |
|--------------|---|---------------|
| Brad Steward | Resource Specialist Clark State Forest | Field meeting |
| Allie Cline | Forest Intern, Clark State Forest | Field meeting |
| Wayne Werne | Resource Specialist, Harrison-Crawford State Forest | Field meeting |
| Dwayne Sieg | Property Manager, Harrison-Crawford State Forest | Field meeting |
| John Segari | Resource Specialist, Harrison-Crawford State Forest | Field meeting |

List of other Stakeholders Consulted

| Name/ Title | Organization | Contact | Consultation method |
|--------------|--------------------|---------|---------------------|
| Don Skelton | Independent Sawyer | | Field meeting |
| Kelly Bixler | Independent Logger | | Field meeting |

Appendix 4 – Additional Audit Techniques Employed

Appendices 9 and 10 were included to facilitate SCS’ internal review of social impacts and High Conservation Value Forests.

Appendix 5 – Pesticide Derogations

| <input checked="" type="checkbox"/> There are no active pesticide derogations for this FME. | | |
|---|---------------------|--------------------------|
| Name of pesticide/ herbicide (active ingredient) | | Date derogation approved |
| | | |
| Condition | Conformance (C/ NC) | Evidence of progress |
| | | |
| | | |

Appendix 6 – Detailed Observations

| Evaluation Year | FSC P&C Reviewed |
|-----------------|--|
| 2011 | All – (Re)certification Evaluation |
| 2012 | 1.5, 2.3, 3.2, 4.2, 4.4, 5.6, 6.2, 6.3, 8.2, 9.4 |
| 20XX | |
| 20XX | |
| 20XX | |

C= Conformance with Criterion or Indicator
 NC= Non-Conformance with Criterion or Indicator
 NA = Not Applicable
 NE = Not Evaluated

| REQUIREMENT | C/N C | COMMENT/CAR |
|--|----------|---|
| P1 Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria. | | |
| C1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities. | C | |
| 1.5.a. The forest owner or manager supports or implements measures intended to prevent illegal and unauthorized activities on the <i>Forest Management Unit</i> (FMU). | C | <p>There is ample evidence of conformance with 1.5.a. including:</p> <ul style="list-style-type: none"> • Active marking of property boundaries with all boundaries inspected every 5 years. • DOF is purchasing in-holdings in order to have a more contiguous ownership that is easier to manage • DOF gates access roads • ATV's are prohibited on State Forests. • DOF maintains a "good neighbor database" and invites the public to yearly open houses • DoF maintains a close working relationship with Law Enforcement. • DoF does a good job posting state forest regulations and trail closures. |
| 1.5.b. If illegal or unauthorized activities occur, the forest owner or manager implements actions designed to curtail such activities and correct the situation to the extent possible for meeting all land management objectives with consideration of available resources. | C | <p>DOF works closely with law enforcement officers to curtail illegal activities. No ATV activity was observed during the assessment. DOF attempts to deal with unauthorized horse trails by hindering entrances to them and repairing existing authorized trails. Observed effective closure of an illegal horse trail on Clark State Forest.</p> |
| P2 Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established. | | |
| C2.3. Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified. | C | |
| 2.3.a. If <i>disputes</i> arise regarding tenure claims or use rights then the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If these good-faith efforts fail, then federal, state, and/or local laws are employed to resolve such disputes. | C | <p>DOF maintains an open door policy both at the level of the central office and each state forest. SCS was informed the strategy is to listen to the complaint, make accommodations and resolve the issue if possible, or explain the reason for not being able to accommodate the concern.</p> <p>If concerns cannot be resolved at the individual state forest level, or the central office, concerned stakeholders are informed that they can raise their complaints to the Natural Resources Commission (NRC) - which meets bi-monthly. Following the NRC, the U.S. court system is an option.</p> <p>DOF attempts to deal with encroachment issues on a case-by-case basis (e.g., boundary issues, such as cutting some trees and installation of septic tanks on</p> |

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| | | state lands). DOF staff regularly check boundaries for timber sales that abut other ownerships. Additionally, they often apply a no-harvest buffer zone to these types of sales. |
| 2.3.b. The forest owner or manager documents any significant disputes over tenure and use rights. | C | DOF tracks legal ownership and boundary disputes through the State Land Office. Most issues deal with timber theft and unauthorized installation of septic lines or other utilities into state lands. |
| P3 The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected. | | |
| C3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples. | C | |
| 3.2.a. During management planning, the forest owner or manager consults with American Indian groups that have legal rights or other binding agreements to the FMU to avoid harming their resources or rights. | C | In May of 2007, DOF sent letters to both federally recognized and unrecognized tribes with ancestral connections to the State of Indiana. DOF received three responses, including one update to contact information. Tribes have not expressed interest in any DOF state forests or resources. |
| 3.2.b. Demonstrable actions are taken so that forest management does not adversely affect tribal resources. When applicable, evidence of, and measures for, protecting tribal resources are incorporated in the management plan. | C | DoF manages its State Forest with a high level of caution for archeological sites. The DoF staff archeologist reviews the state database for prehistoric sites prior to the start of the harvest. If sites are located within a harvest zone they are well buffered. Observed a rock shelter on Harrison Crawford with lithic scatter in the area that was protected. DOF conducts archaeology reviews of projects and in that process may identify the need to research further areas. This is in procedures manual for cultural resources. DOF has also developed a White Paper on its protection of archaeological resources. |
| P4 Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities. | | |
| C4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services. | NE | |
| C4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families. | C | |
| 4.2.a. The forest owner or manager meets or exceeds all applicable laws and/or regulations covering health and safety of employees and their families (also see Criterion 1.1). | C | DOF takes active steps to ensure safety, such as: <ul style="list-style-type: none"> • safety inspections from IDNR ADA & Safety Compliance Section occur at each state forest; • safety meetings take place once per month; • safety training classes are offered, e.g., chainsaw safety for DOF employees; • DOF provides insect repellent and safety boots for staff; • DOF is an active support of logger education in Indiana. Observed good conformance with safety protocol during the 2012 audit. |
| 4.2.b. The forest owner or manager and their employees and contractors demonstrate a safe work environment. | C | DOF's timber sale agreement (4A Timber Sale Agreement) includes several items related to safety |

| | | |
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| <p>Contracts or other written agreements include safety requirements.</p> | | <p>(see items 12, 13, 15, 18, and 19). The TSI contract (4A TSI Bid-Contract under \$75,000) includes a section on compliance with all applicable federal, state, and local laws, which includes OSHA safety requirements.</p> |
| <p>4.2.c. The forest owner or manager hires well-qualified service providers to safely implement the management plan.</p> | <p>C</p> | <p>DOF's timber sale agreement requires that at least one logger on each job site have at least complete Game of Logging (GOL) Level 1 training. Interviewed logger on Morgan Monroe who had received Game of Logging Level 1 training.</p> |
| <p>C4.4. Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.</p> | <p>C</p> | |
| <p>4.4.a. The forest owner or manager understands the likely social impacts of management activities, and incorporates this understanding into management planning and operations. Social impacts include effects on:</p> <ul style="list-style-type: none"> • Archeological sites and sites of cultural, historical and community significance (on and off the FMU); • Public resources, including air, water and food (hunting, fishing, collecting); • Aesthetics; • Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health; • Community economic opportunities; • Other people who may be affected by management operations. <p>A summary is available to the CB.</p> | <p>C*</p> | <p>Historical archaeological sites are in many areas and most likely make 80-90% of annual archaeological findings. The Historic Sites are mostly old homesteads, cottage industry sites, and old schools and churches. DHPA is contacted for all known archeological sites as they are regulatory agency over site investigations. DOF sends site report for all DoF surveyed areas.</p> <p>As for Economic opportunities, timber sales are offered at different scales (volumes) for different businesses, such as for TSI and invasive species control.</p> <p>DOF has several open houses each year for public outreach that have an education component. DOF also has exhibits at county fairs.</p> <p>DoF lacks a clear consistent approach for recording comments at open houses and tracking other complaints that are received at a State Forest Property. Observation 2012.1</p> <p>See Appendix 9 for a summary of DoF's efforts at understanding and accommodating for social impacts of management activities.</p> |
| <p>4.4.b. The forest owner or manager seeks and considers input in management planning from people who would likely be affected by management activities.</p> | <p>C</p> | <p>All management planning documents and timber sale plans are open to public comment for at least 30 days prior to finalization. Additionally, DOF holds several public meetings and open houses throughout the state each year to solicit and address public comments.</p> |
| <p>4.4.c. People who are subject to direct adverse effects of management operations are apprised of relevant activities in advance of the action so that they may express concern.</p> | <p>C</p> | <p>There are two principle ways that people are apprised of relevant activities: 1) timber sales & state forest management guides are on the website and stakeholders can provide comments; and 2) Open houses (at open house will have list of planned activities). DOF also attempts to prepare news releases to advertise events. For adjacent landowners, a notification letter on upcoming timber sales is sent.</p> |
| <p>4.4.d. For public forests, consultation shall include the following components:</p> <ol style="list-style-type: none"> 1. Clearly defined and accessible methods for public participation are provided in both long and short-term planning processes, including harvest plans and operational plans; 2. Public notification is sufficient to allow | <p>C</p> | <p>No changes to public consultation process since the 2011 recertification assessment. The following conformance evidence is from the 2011 report.</p> <p>For background in this indicator and DOF, see Major CAR 2006.2 and minor CAR 2007.1. This indicator is nearly identical to the previous standard and those</p> |

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| <p>interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management;</p> <p>3. An accessible and affordable appeals process to planning decisions is available.</p> <p>Planning decisions incorporate the results of public consultation. All draft and final planning documents, and their supporting data, are made readily available to the public.</p> | | <p>CARs addressed items 1-3, as well as the unnumbered part, of the indicator.</p> <p>See indicator 7.1.r for an explanation of the stakeholder consultation process that address parts 1-3 of this indicator. See also comments in Principle 9 related to public consultation.</p> <p>In Indiana, stakeholders are free to use the legal system to appeal planning decisions. However, DOF's notification to adjacent landowners of upcoming activities, open door policies, annual open houses, and State Forest Stewardship Committee meetings are avenues for resolving grievances prior to legal action.</p> <p>All management planning documents (drafts and final versions), including upcoming timber sales, are made completely available to the public online. The public can also access publications and data on the website or upon request.</p> |
| <p>P5 Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.</p> | | |
| <p>C5.6. The rate of harvest of forest products shall not exceed levels which can be permanently sustained.</p> | <p>C</p> | |
| <p>5.6.a. In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the planning unit. The sustained yield harvest level calculation is documented in the Management Plan.</p> <p>The sustained yield harvest level calculation for each planning unit is based on:</p> <ul style="list-style-type: none"> • documented growth rates for particular sites, and/or acreage of forest types, age-classes and species distributions; • mortality and decay and other factors that affect net growth; • areas reserved from harvest or subject to harvest restrictions to meet other management goals; • silvicultural practices that will be employed on the FMU; • management objectives and desired future conditions. <p>The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.</p> | <p>C</p> | <p>Approximately 14.5 mmbf were harvested from the state forests during fiscal year 2011-2012. With annual growth of 24 mmbf this represents approximately 60% of a maximum allowable sustained yield.</p> <p>After the tornado damage in Clark State Forests and subsequent salvage, DoF prepared an analysis of historical harvest to demonstrate continued conformance with 5.6.a. The analysis showed that the volume lost through the salvage has been absorbed by the fact that Clark has been harvesting below its target over the last 5 years.</p> <p>As there have been no changes to allowable harvest approaches, please see the 2011 recertification report for additional details regarding conformance with 5.6.a.</p> |
| <p>5.6.b. Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.</p> | <p>C</p> | <p>DOF uses 4 year rolling period to ensure that it does not exceed the calculate sustained yield harvest rate. Harvest records for the sites visited show that DOF does not exceed the calculated harvest rate. Target is set at approx 60% of growth.</p> <p>2009-2010 = 85% of target 2010-2011 = 98.1% of target 2011-2012 = 100 % of target 2012-2013 = on track for 100%</p> |

| | | |
|--|-----------|--|
| <p>5.6.c. Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that have been depleted or rendered to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.</p> | <p>C</p> | <p>Harvest sites visited during the 2012 audit were consistent with achieving desired future conditions and maintaining forest health across the FMU. Observed good examples of regeneration openings in some places. See the 2011 recertification report for additional details regarding conformance with 5.6.c.</p> |
| <p>5.6.d. For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary use rights may be impacted by such harvests. In other situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.</p> | <p>NA</p> | <p>DOF does not have any significant commercially harvested NTFPs.</p> |
| <p>P6 Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.</p> | | |
| <p>C 6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping, and collecting shall be controlled.</p> | <p>C</p> | |
| <p>6.2.a. If there is a likely presence of RTE species as identified in Indicator 6.1.a then either a field survey to verify the species' presence or absence is conducted prior to site-disturbing management activities, or management occurs with the assumption that potential RTE species are present.</p> <p>Surveys are conducted by biologists with the appropriate expertise in the species of interest and with appropriate qualifications to conduct the surveys. If a species is determined to be present, its location should be reported to the manager of the appropriate database.</p> | <p>C</p> | <p>Confirmed systematic use of the Division of Nature Preserves Heritage Database to screen for T and E species in management areas. When species are detected in a database query, DOF has its own wildlife biologist to carry out surveys and devise protection plans. Many occurrences are outside of the management area and would not be impacted, e.g., wetland plants.</p> |
| <p>6.2.b. When RTE species are present or assumed to be present, modifications in management are made in order to maintain, restore or enhance the extent, quality and viability of the species and their habitats. Conservation zones and/or protected areas are established for RTE species, including those S3 species that are considered rare, where they are necessary to maintain or improve the short and long-term viability of the species. Conservation measures are based on relevant science, guidelines and/or consultation with relevant, independent experts as necessary to achieve the conservation goal of the Indicator.</p> | <p>C</p> | <p>When T and E species are known to occur (by querying the Natural Heritage Data), staff will determine appropriate steps to protect the species. These steps may include a consultation with the biologist or ecologist or written species- specific management plans to accommodate individual species requirements. Staff consult Natureserve web site to search for management guidelines for T and E species. The HCP is being revised and designed to improve habitat for multiple sensitive species.</p> |
| <p>6.2.c. For medium and large public forests (e.g. state forests), forest management plans and operations are designed to meet species' recovery goals, as well as landscape level biodiversity conservation goals.</p> | <p>C</p> | <p>The HCP has been accelerated and is being designed to meet recovery goals of the Indiana Bat as well as improve habitat for a multitude of keystone species. Currently, DOF follows its interim guidelines on the conservation of the Indiana Bat. These guidelines were developed by its biologist in consultation with federal</p> |

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|---|---|---|
| | | agencies. |
| 6.2.d. Within the capacity of the forest owner or manager, hunting, fishing, trapping, collecting and other activities are controlled to avoid the risk of impacts to vulnerable species and communities (See Criterion 1.5). | C | On Harrison Crawford State forest caves, which were a popular recreation spot, were closed to protect Indiana Bat. DOF field staff regularly patrol the FMU to detect unauthorized activities and work with interested user groups to avoid adverse impacts to flora, fauna, and soil resources. For example, SCS observed signage at district offices regarding ginseng harvesting. |
| C6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem. | C | |
| 6.3.a.1. The forest owner or manager maintains, enhances, and/or restores under-represented successional stages in the FMU that would naturally occur on the types of sites found on the FMU. Where old growth of different community types that would naturally occur on the forest are under-represented in the landscape relative to natural conditions, a portion of the forest is managed to enhance and/or restore old growth characteristics. | C | DOF target is to maintain 10% of the forest in the underrepresented early successional stage. The Tornado damage on Clark has created a large area of early successional forest. Late successional forests are maintained via different management designations including backcountry areas, Nature Preserves, forest research control (no harvest) research areas, buffers around hibernacula, and old growth areas. |
| 6.3.a.2. When a rare ecological community is present, modifications are made in both the management plan and its implementation in order to maintain, restore or enhance the viability of the community. Based on the vulnerability of the existing community, conservation zones and/or protected areas are established where warranted. | C | Open barrens habitat is managed to maintain the open condition with the use of fire. DOF has a policy to allow management to occur in rare ecological communities if it maintains or enhances the viability of the community. |
| 6.3.a.3. When they are present, management maintains the area, structure, composition, and processes of all Type 1 and Type 2 old growth . Type 1 and 2 old growth are also protected and buffered as necessary with conservation zones, unless an alternative plan is developed that provides greater overall protection of old growth values. Type 1 Old Growth is protected from harvesting and road construction. Type 1 old growth is also protected from other timber management activities, except as needed to maintain the ecological values associated with the stand, including old growth attributes (e.g., remove exotic species, conduct controlled burning, and thinning from below in dry forest types when and where restoration is appropriate). Type 2 Old Growth is protected from harvesting to the extent necessary to maintain the area, structures, and functions of the stand. Timber harvest in Type 2 old growth must maintain old growth structures, functions, and components including individual trees that function as refugia (see Indicator 6.3.g). On public lands, old growth is protected from harvesting, as well as from other timber management activities, except if needed to maintain the values associated with the stand (e.g., remove exotic species, conduct controlled burning, and thinning from below in forest types when and where restoration is appropriate). On American Indian lands, timber harvest may be | C | DoF is now in conformance with 6.3.a. See response to CAR 2011.4. |

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| <p>permitted in Type 1 and Type 2 old growth in recognition of their sovereignty and unique ownership. Timber harvest is permitted in situations where:</p> <ol style="list-style-type: none"> 1. Old growth forests comprise a significant portion of the tribal ownership. 2. A history of forest stewardship by the tribe exists. 3. High Conservation Value Forest attributes are maintained. 4. Old-growth structures are maintained. 5. Conservation zones representative of old growth stands are established. 6. Landscape level considerations are addressed. 7. Rare species are protected. | | |
| <p>6.3.b. To the extent feasible within the size of the ownership, particularly on larger ownerships (generally tens of thousands or more acres), management maintains, enhances, or restores habitat conditions suitable for well-distributed populations of animal species that are characteristic of forest ecosystems within the landscape.</p> | C | <p>IDNR DIVISION OF FORESTRY STRATEGIC PLAN 2008-2013 has a goal to provide a range of forest habitats that will provide suitable conditions for well-distributed animal populations. See also comments on late and early seral habitat in 6.3.a.1.</p> |
| <p>6.3.c. Management maintains, enhances and/or restores the plant and wildlife habitat of Riparian Management Zones (RMZs) to provide:</p> <ol style="list-style-type: none"> a) habitat for aquatic species that breed in surrounding uplands; b) habitat for predominantly terrestrial species that breed in adjacent aquatic habitats; c) habitat for species that use riparian areas for feeding, cover, and travel; d) habitat for plant species associated with riparian areas; and, e) stream shading and inputs of wood and leaf litter into the adjacent aquatic ecosystem. | C | <p><u>Indiana Logging and Forestry Best Management Practices: BMP Field Guide</u> (BMP Field Guide) is used by field foresters to guide the protection of RMZs. The buffer zones established in RMZs ensure upland-lowland connectivity (a, b, and c) and maintenance of riparian vegetation and soils (d and e). Field visits in 2012 confirmed generally good conformance with BMP's of Riparian Management Zones.</p> |
| <p>Stand-scale Indicators 6.3.d Management practices maintain or enhance plant species composition, distribution and frequency of occurrence similar to those that would naturally occur on the site.</p> | C | <p>This is accomplished through silviculture that mimics small scale disturbances (group openings) and individual tree mortality (thinning from below during improvement cuts). DOF uses fire and herbicides in efforts to maintain the oak-hickory component where species competition from later seral species (beech/maple) results in forest type change. Prescribed fire is consistent with historic natural disturbance regimes implemented by Native Americans.</p> |
| <p>6.3.e. When planting is required, a local source of known provenance is used when available and when the local source is equivalent in terms of quality, price and productivity. The use of non-local sources shall be justified, such as in situations where other management objectives (e.g. disease resistance or adapting to climate change) are best served by non-local sources. Native species suited to the site are normally selected for regeneration.</p> | C | <p>Seedlings planted in the forest are grown in the local nursery managed by the State.</p> |
| <p>6.3.f. Management maintains, enhances, or restores habitat components and associated stand structures, in abundance and distribution that could be expected from naturally occurring processes. These components include: a) large live trees, live trees with decay or declining health, snags, and well-distributed coarse down and dead woody material. Legacy trees where present are not harvested;</p> | C | <p>DOF has an excellent guide "Management guidelines for compartment-level wildlife habitat features" that field foresters use to maintain or enhance site-level habitat components, such as large live trees, declining trees, and snags. The October 20, 2008 version has been updated to provide a definition and criteria for protecting legacy</p> |

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| <p>and b) vertical and horizontal complexity. Trees selected for retention are generally representative of the dominant species found on the site.</p> | | <p>trees. During the 2012 audit, SCS auditor observed excellent retention of stand-level wildlife habitat elements, consistent with the management guidelines. Indiana Bat retention guidelines are being used by field foresters (confirmed from resource management guides and interviews with field foresters). These include provisions for vertical and horizontal complexity, such as opening the south side of trees designated as roosts to sunlight.</p> |
| <p>6.3.g.1 In the Southeast, Appalachia, Ozark-Ouachita, Mississippi Alluvial Valley, and Pacific Coast Regions, when even-aged systems are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit as described in Appendix C for the applicable region.</p> <p>In the Lake States Northeast, Rocky Mountain and Southwest Regions, when even-aged silvicultural systems are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime unless retention at a lower level is necessary for the purposes of restoration or rehabilitation. See Appendix C for additional regional requirements and guidance.</p> | <p>NC</p> | <p>Although DOF primarily employs uneven-aged management practices, such as individual tree selection and group selection, 2012 tornado salvage on Clark State Forest provided an opportunity for even-aged management. The salvage included a clear-cut zone of approximately 600 acres that did not include a specific prescription for green tree retention. Post tornado aerial photographs showed that even in the severe impact zone there were still some small standing patches where some characteristic green tree retention could have been left. CAR 2012.3</p> |
| <p>6.3.g.2 Under very limited situations, the landowner or manager has the option to develop a qualified plan to allow minor departure from the opening size limits described in Indicator 6.3.g.1. A qualified plan:</p> <ol style="list-style-type: none"> 1. Is developed by qualified experts in ecological and/or related fields (wildlife biology, hydrology, landscape ecology, forestry/silviculture). 2. Is based on the totality of the best available information including peer-reviewed science regarding natural disturbance regimes for the FMU. 3. Is spatially and temporally explicit and includes maps of proposed openings or areas. 4. Demonstrates that the variations will result in equal or greater benefit to wildlife, water quality, and other values compared to the normal opening size limits, including for sensitive and rare species. 5. Is reviewed by independent experts in wildlife biology, hydrology, and landscape ecology, to confirm the preceding findings. | <p>NA</p> | <p>There are no even-aged management restrictions in the Lake States/ Central Hardwood region.</p> |
| <p>6.3.h. The forest owner or manager assesses the risk of, prioritizes, and, as warranted, develops and implements a strategy to prevent or control invasive species, including:</p> <ol style="list-style-type: none"> 1. a method to determine the extent of invasive species and the degree of threat to native species and ecosystems; 2. implementation of management practices that minimize the risk of invasive establishment, growth, and spread; 3. eradication or control of established invasive populations when feasible: and, | <p>C</p> | <p>See response to CAR 2011.5</p> |

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| <p>4. monitoring of control measures and management practices to assess their effectiveness in preventing or controlling invasive species.</p> | | |
| <p>6.3.i. In applicable situations, the forest owner or manager identifies and applies site-specific fuels management practices, based on: (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, (4) public safety, and (5) applicable laws and regulations.</p> | <p>C</p> | <p>DOF provided the audit team with well written and well planned site-level fire plans that are primarily conducted in oak-hickory understories to control competing species. This regime mimics natural periodic ground fires that historically occurred in this habitat type.</p> |
| <p>P7 A management plan -- appropriate to the scale and intensity of the operations -- shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.</p> | | |
| <p>P8 Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -- to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.</p> | | |
| <p>8.2. Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators: a) yield of all forest products harvested, b) growth rates, regeneration, and condition of the forest, c) composition and observed changes in the flora and fauna, d) environmental and social impacts of harvesting and other operations, and e) cost, productivity, and efficiency of forest management.</p> | <p>C</p> | |
| <p>8.2.a.1. For all commercially harvested products, an inventory system is maintained. The inventory system includes at a minimum: a) species, b) volumes, c) stocking, d) regeneration, and e) stand and forest composition and structure; and f) timber quality.</p> | <p>C</p> | <p>DOF meets the breadth of this Indicator through its periodic system-wide inventory and CFI system, which together cover items a)-f).</p> |
| <p>8.2.a.2. Significant, unanticipated removal or loss or increased vulnerability of forest resources is monitored and recorded. Recorded information shall include date and location of occurrence, description of disturbance, extent and severity of loss, and may be both quantitative and qualitative.</p> | <p>C</p> | <p>DOF has a strong program for monitoring timber theft and has recorded significant events, such as storm damage, in updates to management guides and during the HCV review process. With the unanticipated tornado damage, DoF developed estimates of lost volumes and incorporated it into allowable harvest calculations.</p> |
| <p>8.2.b The forest owner or manager maintains records of harvested timber and NTFPs (volume and product and/or grade). Records must adequately ensure that the requirements under Criterion 5.6 are met.</p> | <p>C</p> | <p>Permits are not allowed for ginseng harvesting on State Forests. The Division of Nature Preserves is responsible for regulating the harvest and trade of ginseng in the State. Sales records are kept for each timber sale that allow for volume analysis at the district and whole-state forest system level. Current harvest data shows that harvest does not exceed growth.</p> |
| <p>8.2.c. The forest owner or manager periodically obtains data needed to monitor presence on the FMU of:</p> <ol style="list-style-type: none"> 1) Rare, threatened and endangered species and/or their <i>habitats</i>; 2) Common and rare plant communities and/or habitat; 3) Location, presence and abundance of invasive species; 4) Condition of protected areas, set-asides and buffer zones; 5) High Conservation Value Forests (see Criterion 9.4). | <p>C</p> | <p>Confirmed continued conformance with 8.2 requirements. There were no changes to the approaches described in the 2011 recertification report.</p> <p>Indiana DOF properties section wildlife biologist completes annual monitoring snag and cavity trees, spring resident bird populations, summer breeding bird populations, forest amphibians, and deer impacts from browsing.</p> <p>Division of Fish & Wildlife, Fisheries section conducts annual creel census. The State of Indiana has a breeding bird atlas. Periodic surveys are completed for bats in caves.</p> |

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| | | <p>Periodic surveys are completed for the wood rat. Ruffed Grouse drumming surveys are completed. Nature Preserves completes annual surveys on preserves. DOF completes monitoring of BMP's (see "1996-2011 Forestry Best Management Practices Monitoring Results")</p> <p>T and E species that were previously undetected in other surveys are reported to the Natural Heritage Inventory Database.</p> <p>Monitoring of HCV occurs as part of site inspections and, if near an active harvest, as part of harvest monitoring. Should HCVs undergo active management, such as prescribed fire, DOF monitors the response (e.g., regeneration).</p> <p>When management guides are updated, the invasive species section must also be updated. Informal monitoring also occurs and since most field staff are licensed applicators, they may treat trouble spots quickly.</p> <p>See C9.4 for HCVs.</p> |
| <p>8.2.d.1. Monitoring is conducted to ensure that site specific plans and operations are properly implemented, environmental impacts of site disturbing operations are minimized, and that harvest prescriptions and guidelines are effective.</p> | <p>C</p> | <p>Evidence of monitoring includes the following reports and records:</p> <ul style="list-style-type: none"> • Timber sale inspection reports • Annual BMP monitoring report results • Contract monitoring (TSI forms) <p>More fundamental to meeting this indicator, DOF inspects active timber sales and conducts post-harvest reviews to ensure that objectives and BMPs are being met. During 2012 audit reviewed timber harvest inspection reports and annual BMP monitoring results.</p> |
| <p>8.2.d.2. A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.</p> | <p>C</p> | <p>DOF monitors road construction and maintenance by tracking how many miles are completed each year per forest employee. Informal inspections occur during and after timber harvests.</p> |
| <p>8.2.d.3. The landowner or manager monitors relevant socio-economic issues (see Indicator 4.4.a), including the social impacts of harvesting, participation in local economic opportunities (see Indicator 4.1.g), the creation and/or maintenance of quality job opportunities (see Indicator 4.1.b), and local purchasing opportunities (see Indicator 4.1.e).</p> | <p>C</p> | <p>See response to CAR 2011.11 and Appendix 9.</p> |
| <p>8.2.d.4. Stakeholder responses to management activities are monitored and recorded as necessary.</p> | <p>C</p> | <p>Strategic Plan and EA has stakeholder comments and responses recorded.</p> |
| <p>8.2.d.5. Where sites of cultural significance exist, the opportunity to jointly monitor sites of cultural significance is offered to tribal representatives (see Principle 3).</p> | <p>C</p> | <p>No tribes have expressed interest in monitoring sites of cultural significance. Many sites are pre-contact, making it difficult to tell which tribal groups were present.</p> |
| <p>8.2.e. The forest owner or manager monitors the costs and revenues of management in order to assess productivity and efficiency.</p> | <p>C</p> | <p>Costs of arranging each timber sale are included in each site plan for later analysis. The budget office maintains information on all expenditures and income.</p> |

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| | | DOF's upper management analyses budgets for individual projects and the department as a whole to assess productivity and efficiency. |
| <p>P9 Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.</p> <p>High Conservation Value Forests are those that possess one or more of the following attributes:</p> <ul style="list-style-type: none"> a) Forest areas containing globally, regionally or nationally significant: concentrations of biodiversity values (e.g., endemism, endangered species, refugia); and/or large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance b) Forest areas that are in or contain rare, threatened or endangered ecosystems c) Forest areas that provide basic services of nature in critical situations (e.g., watershed protection, erosion control) d) Forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities). | | |
| C9.4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes. | C | |
| 9.4.a. The forest owner or manager monitors, or participates in a program to annually monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of Principle 8. | C | See response to CAR 2011.15 and appendix 10. |
| 9.4.b. When monitoring results indicate increasing risk to a specific HCV attribute, the forest owner/manager re-evaluates the measures taken to maintain or enhance that attribute, and adjusts the management measures in an effort to reverse the trend. | C | <p>Nature Preserve personnel have suggested that periodic burning be used to maintain the Leavenworth Barrens as an open habitat.</p> <p>DOF has been working on an Indiana Bat HCP for some time. In the meantime, DOF applies its interim guidelines for Indiana Bat from March 2004.</p> |

Appendix 7 – Chain of Custody Indicators for FMEs

Chain of Custody indicators were not evaluated during this annual audit.

Appendix 8 – Group Management Program Members

DoF is not a group certificate.

Appendix 9- Summary and Monitoring of Social Impacts of State Forest Management Activities

The Indiana Department of Natural Resources – Division of Forestry (DoF) takes into consideration social impacts of management activities, incorporating them into management planning and operations. Some of the factors considered when making discussions include archaeological and culturally significant sites, public resources, aesthetics, community goals and economic opportunities.

Archaeological sites and sites of cultural, historical, and community significance are placed under consideration prior to management activities. Cultural resources, both within and outside of the Forest Management Unit (FMU), are evaluated to determine if the planned activity will result in an adverse impact to these sensitive resources. Section M of the Resource Procedure Manual, which is

located on the DoF webpage at www.in.gov/dnr/forestry/3647.htm, describes how these resources are addressed and incorporated into decision making procedures. Public involvement is available through several opportunities. Management guides include a section for cultural resources and are available for public comment on the DoF web page at www.in.gov/dnr/forestry/3634.htm. In addition, projects that require a Certificate of Approval through the DNR – Division of Historic Preservation and Archaeology (DHPA) are also posted for a public comment period. DHPA handles the posting of these projects as well as the evaluation of the received comments.

Public resources, including air, water, and soil, have been evaluated for both ‘direct’ and ‘indirect’ effects of management activities as well as the cumulative effect of said activities on these public resources. The results of this analysis are located within the 2008 Environmental Assessment (EA) document published by DoF and indicates that although some short term effects may occur (such as smoke from prescribed burns or dust from road construction) the effects should remain at “a level that would be minor, localized, and would not have a measurable long term effect.” In specifically addressing those items used as food resources by DoF’s customers the study found that while some negative impacts may result from management activities, they should not be in levels that would affect population, and, in fact, some species may benefit from the planned management activity (DoF 2008).

Aesthetics were also reviewed for the EA and included both visual effects and noise that resulted from management activities. The study concludes that while management activities would visually alter the FMU, these effects should remain short term and would only last as long as the activity was in progress. Also, areas which initially may appear as an altered landscape would, during the following growing seasons, begin to regrow. The draft EA, which described management considerations and activities, was made available for public comment by posting the manuscript on the DoF web page from May 8, 2008 to July 15, 2008. A statewide news release, which was also sent directly to key stakeholders, announced the availability of the review period. The comments received and DoF’s responses were summarized within the final print of the EA. In addition, DoF does consider and utilize Visual Enhancement Areas (VEA) during management activities. Management within VEAs and recreational areas typically consist of the removal of dead or hazard trees and/or the selective removal of trees with a high risk of loss or death during the next management cycle.

Community goals for forest and natural resource use and protection is obtained through open houses and other available formats for public input, such as meeting with friend groups or comments received via personal communications. Community economic opportunities are made available not only through harvests but also events held on the properties. Harvests are scaled to different sizes to attract a wide variety of bidders. A portion of the proceeds (15%) from sales on the FMU, which equate to nearly \$2.5 million per year, are returned to the county for investment into community. For the 2010-2011 fiscal year, over \$283,000 was distributed to the counties as a direct result of the timber management program (DoF 2010). According to the 2005 Strategic Plan, for every dollar of timber sold approximately \$10.25 is generated in additional direct revenue to the Indiana economy (INDNR 2005). Furthermore, the 2005 BioCrossroads report detailing Indiana’s agricultural economy states that Indiana’s hardwood industry employs over 47,000 Hoosiers (Meeusen and Swain 2005).

Social-economic issues are, in part, monitored by organizations outside of the DoF. These organizations often work in cooperation with the DoF and their reports, which are made available to the public, are considered sufficient in monitoring of the social-economic issues and, therefore, DoF has not attempted to reconstruct the same studies. One example of such a report is the yearly *Indiana Forest Products Price Report and Trend Analysis* published by Purdue University which follows the economic trends of Indiana's primary forest manufactures (Hoover 2011, 2010, 2009). The report not only analyzes market trends but also the social-economic basis behind these movements. A 2011 study by Hoover and McCoy looks at the social-economic impact of the Morgan-Monroe-Yellowwood State Forest complex. Although the study focuses on the one management unit, the results of the analysis can be extrapolated across the entire FMU (Hoover and McCoy 2011). Furthermore, the results of DoF's monitoring of social-economic issues have also been summarized in a report by Purdue and DoF titled *Indiana's Hardwood Industry: It's Economic Impact* (Hoover and Settle 2010). This report breaks down Indiana's hardwood industry by producers, primary industry, and secondary industry and discusses factors that affect its economic impact and structure.

In 2009 DoF precipitated a survey of Indiana residents concerning their opinion of the State Forest. The results of the survey were published as *Indiana Residents' Perception of Woodland Management "Indiana Woodland Monitor 2009 (IWM-09)"*. A total of 1,402 Indiana adult (18 years or older) residents completed the survey, permitting DoF the ability to gage its customers perceptions. The majority of the respondents (78%) indicated that they, or someone in the household, engaged in select outdoor activities. The majority also approved of harvesting trees for management if overseen by a professional forester (85%) or for wildlife habitat improvement (82%). The majority of the respondents (61%) also approved of harvesting in order to make lumber or other wood products. Furthermore, 88% of the respondents agreed with the statement "Indiana woodlands should be managed for a balance of wood products that we use, and other benefits like recreation, wildlife, and good water quality" (Amberg 2010).

In addition, the DoF provides a written annual timber sale summary to all properties, staff, and key stakeholders. This summary includes a comparison between the recently completed fiscal year and the previous fiscal year covering the total price received, price per board foot, sawtimber volume, harvest target acres, acres of opening, volume of trees, etc. Also included is a breakdown of the harvests by species as well as information on the amount of dollars returned to the counties through the timber management program. This information is summarized not only at the system level, but also by individual properties within the system allowing not only for comparison of the state but also regional comparisons within the state.

Surveys and reports such as the ones mentioned above are just one of several ways in which social and social-economic impacts are incorporated and monitored by the DoF. These coupled with public comments periods on management plans and management activities, open houses, and various opportunities for public involvement such as meetings and personal communications, facilitate in management planning and provide a valuable source of input from DoF's consumers and stakeholders. Comments received via these various opportunities are taken into consideration and incorporated into management planning and operations.

References

Amberg, Shannon M.

- 2010 *Indiana Residents' Perceptions of Woodland Management: "Indiana Woodland Monitor 2009 (IWM-09)"*. Purdue University, West Lafayette, Indiana.

Hoover, William L.

- 2011 *Indiana Forest Products Price Report and Trend Analysis*. Purdue University Cooperative Extension Service, West Lafayette, Indiana.
- 2010 *Indiana Forest Products Price Report and Trend Analysis*. Purdue University Cooperative Extension Service, West Lafayette, Indiana
- 2009 *Indiana Forest Products Price Report and Trend Analysis*. Purdue University Cooperative Extension Service, West Lafayette, Indiana

Hoover, William L. and Duane McCoy

- 2011 *Value of the Morgan-Monroe-Yellowwood State Forest Complex*. Purdue University, West Lafayette, Indiana and Indiana Department of Natural Resources – Division of Forestry, Indianapolis, Indiana.

Hoover, William L. and Jeffrey Settle

- 2010 *Indiana's Hardwood Industry: Its Economic Impact*. Purdue University, West Lafayette, Indiana and Indiana Department of Natural Resources – Division of Forestry, Indianapolis, Indiana.

DoF (Indiana Department of Natural Resources – Division of Forestry)

- 2005 *IDNR Division of Forestry Strategic Plan 2005-2007*. Indiana Department of Natural Resources – Division of Forestry, Indianapolis, Indiana.
- 2008 *Indiana State Forests Environmental Assessment 2008-2027*. Indiana Department of Natural Resources – Division of Forestry, Indianapolis, Indiana.
- 2010 *Timber Sale Summary 2010-2011*. Indiana Department of Natural Resources – Division of Forestry, Indianapolis, Indiana.

Meeusen, Ron and Rob Swain

- 2005 *A Strategic Plan for Indiana's Agricultural Economy*. BioCrossroads, Indianapolis, Indiana.

Appendix 10: State Forest Certification High Conservation Value Forests

The Forest Stewardship Council (FSC) provides for the designation of High Conservation Value Forests (HCVFs). These are forest areas that receive added consideration of management activities in order to maintain or enhance conservation value attributes. These attributes may be of biological, ecological, or cultural significance. General information about HCVFs is available of the FSC web site (www.fsc.org).

Beginning in 2007, the Division of Forestry (DoF) designated 15 areas containing a total of 1,926.4 acres as HCVFs. All of these initial areas were dedicated Nature Preserves. Dedicated Nature Preserves are a logical choice for designation at HCVFs since the attributes that make them Nature Preserve quality are the same biological or ecological attributes sought for HCVFs. In 2010 the Division of Forestry added 2 additional areas for a current total of 2,427.1 acres in HCVFs. The Division of Nature Preserves web page (dnr.in.gov) provides additional information on Dedicated Nature Preserves.

Under FSC standards, designation of areas as HCVFs does not preclude management activities. Management of HCVFs will be directed toward maintenance or enhancement of the condition for which the HCVF was designated.

Primary management responsibility of HCVFs that are also Dedicated Nature Preserves will be with the Division of Nature Preserves due to their expertise with botanical and ecological resources. DoF will have secondary management responsibility and will provide support and resources when possible. These are most likely to be HCV1, HCV2 and HCV3 type HCVFs (though not all HCV1, HCV2 and HCV3 areas will be Dedicated Nature Preserves).

Primary management responsibility of all other HCVFs will fall to DoF. This will include all 6 of the HCVFs types.

DESIGNATION OF HCVFs

While DoF will continue to nominate Dedicated Nature Preserves as designated HCVFs, it will also consider nominations of areas for HCVFs from interested, knowledgeable individuals. Below is the process for nominating, reviewing and designating HCVFs.

Nomination

Dedicated Nature Preserves will be nominated by DoF. The nomination process will consist of posting the Nature Preserve on the DoF website for public comment on the nomination as a HCVF.

Individuals may nominate areas for HCVF designation by sending a letter to **Brenda Huter, Certification Coordinator, Indiana Division of Forestry, 402 W. Washington Street, Room W296, Indianapolis, IN 46204; bhuter@dnr.in.gov ; 317-232-4105**. This letter should include location information of the proposed area – State Forest name, legal description by Section, Township and Range, and County. It should also include a map of the proposed area that also includes identifiable landmarks for reference (roads, intersections, rivers/lakes). Also provided should be a brief description from the nominator of the important attributes of the proposed area that make it worthy of consideration for a HCVF.

Nominators must provide contact information – name, address, phone number and email address – so DoF can contact them to gather more information or to clarify nominations.

Public Comment

Nominated areas will be placed on the DoF website for public comment for a minimum of 30 days. Comments should be specific to the area and, in particular, should contain information on the attributes of the area in terms of the criteria for the HCVF types. Comments will be reviewed by a designated review team.

In addition, as part of the Nature Preserve dedication process, proposed nature preserves go before a public meeting of the Natural Resources Commission where public comments are taken about proposals.

Review Process

A review process for a nomination will last up to 6 months, and will involve a team from DoF, and possibly other knowledgeable persons if needed. DoF may add experts with pertinent expertise to the review team depending on the nature of the criteria to be considered. These may be people from sister agencies or outside state government. This time frame may be extended if there is seasonality to the attributes that are to be evaluated, and the extra time is needed to cover the season.

Members of the review team will perform an onsite visit of the nominated area. They will evaluate the nominated area against the criteria it is being nominated for, and in the context of other examples of the same type to determine if it warrants HCVF designation. They will review public comments, particularly in terms of gathering additional information on attributes of the nominated area.

Designation Decision

The review team will present the nomination and the results of its review to the State Forester. They will provide a recommendation regarding designation to the State Forester. The State Forester will have up to 60 days to make a final decision. He will give his decision to the review team.

Members of the review team will then post the designation decision of the DoF website along with a summary of comments received and a response to the comments.

For designated HCVFs, members of the review team will create a management strategy regarding the maintenance or enhancement of the attributes of the HCVFs, and monitoring of the areas. In the case of Dedicated Nature Preserves, the Master Plan for the Nature Preserve serves this function.

DESIGNATED HIGH CONSERVATION VALUE FORESTS

Clark State Forest

White Oak Nature Preserve HCV3 143.1 acres

white oak/mixed oak and hickory forest

State/regionally rare (S3) and high-quality example of mesic upland.

Prescribed management to enhance or maintain described in Master Plan – control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves (DNP) and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Virginia Pine-Chestnut Oak Nature Preserve HCV 1 & HCV3 23.6 acres

Native Virginia pine and chestnut oak forest

Protected area (HCV 1.1) and high-quality example of regionally under-represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Alum Cave Hollow Nature Preserve HCV1 & HCV3 142 acres

Siltstone cliffs, mesic, dry-mesic, and dry upland forests with native Virginia pine forest

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Harrison-Crawford State Forest

Post Oak - Cedar Nature Preserve HCV1 & HCV3 266 acres

Dry upland forest, mesic upland forest; glades; rare plants

Contains high quality state /regionally imperiled and rare (S2S3) limestone barrens and glade communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; control of noxious weeds, minimal disturbance and development.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Scout Mountain Nature Preserve HCV1 & HCV3 40 acres

Mixed mesophytic forest with beech maple and oak-hickory types; cave – *Myotis sodalis hibernacula*

Contains high quality state /regionally critically imperiled and rare (S1) limestone cliff community.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development. Construction of barriers to limit cave access is prescribed.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by Division of Fish and Wildlife (DFW), DNP and DoF.

No known public comments received.

Leavenworth Barrens Nature Preserve HCV1 & HCV3 761.3 acres

Dry upland forest, mesic upland forest; glades; barrens; rare plants

Contains high quality state /regionally imperiled and rare (S2S3) limestone barrens and glade communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Bat Wing Cave Nature Preserve HCV1 10 acres

Cave – *Myotis sodalis hibernacula*

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development. Construction of barriers to limit cave access is prescribed. Additional buffer zone with management limitations outside the actual preserve covers 71 acres of adjoining forest.

Joint management by the Division of Fish and Wildlife, Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DFW, DNP and DoF.

No known public comments received.

Charles C. Deam Nature Preserve HCV1 & HCV3 258.9 acres

Floodplain forest, talus slopes, limestone cliffs, sandstone cliffs, upland forests, rare plants and animals

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DFW, DNP and DoF.

No known public comments received.

Blue River Gravel Wash Nature Preserve HCV1 & HCV3 78 acres

Floodplain forest, limestone cliffs, rare plants

Contains high quality state /regionally critically imperiled and rare (S1) gravel wash community.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DFW, DNP and DoF.

No known public comments received.

Jackson-Washington State Forest

Indian Bitter Nature Preserve HCV1 & HCV3 35 acres

Dry-mesic upland forest, mesic upland forest, cucumber magnolia

State/regionally rare (S3) and high-quality example of mesic upland.

Prescribed management to enhance or maintain described in Master Plan – remove competing vegetation around cucumber magnolia.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Knobstone Glades Nature Preserve HCV3 60 acres

Siltstone glades; xeric, dry and dry-mesic upland forest

Contains high quality state (S2) and globally (G2) imperiled siltstone communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Martin State Forest

Henshaw Bend Nature Preserve HCV3 77 acres

High quality mesic upland forest, river bluffs

State/regionally rare (S3) and high-quality example of mesic upland.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Tank Spring Nature Preserve HCV3 60 acres

Mesic upland forest, sandstone cliffs, prominent spring

State/regionally rare (S3) and high-quality example of mesic upland forest and sandstone cliff communities.

Prescribed management to enhance or maintain described in Master Plan – prescribed burning; minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Morgan-Monroe State Forest

Scout Ridge Nature Preserve HCV1 & HCV3 14.5 acres

Mature beech maple forest

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Sweedy Hollow Nature Preserve HCV3 150.1 acres

Mesic, dry-mesic and dry upland forest; mesic floodplain forest; sandstone cliff communities

State/regionally rare (S3) and high-quality example of mesic upland forest and sandstone cliff communities.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Low Gap Nature Preserve HCV3 320 acres

Mesic, dry-mesic and dry upland forest

Protected area (HCV1.1) and high-quality example of regionally under represented community (S4).

Contains state/regionally rare (S3) and high-quality example of mesic upland forest.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Yellowwood State Forest

Crooked Creek Nature Preserve HCV1 35 acres

Yellowwood tree; mesic and dry-mesic forest

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

Miller Ridge Nature Preserve HCV1 & HCV3 30.6 acres

Yellowwood tree; mesic, dry-mesic and dry upland forest

Contains state/regionally rare (S3) and high-quality example of mesic upland forest.

Prescribed management to enhance or maintain described in Master Plan – minimal disturbance and development; control of noxious weeds.

Joint management by the Division of Nature Preserves and Division of Forestry.

Monitoring will be performed through periodic inspection by DNP and DoF.

No known public comments received.

DECLINED HCVF NOMINATIONS

Morgan-Monroe State Forest

Back Country HCVF No type designated 3,104 acres

Mesic, dry-mesic and dry upland forest

No management prescription provided

Management by the Division of Forestry.

Monitoring will be performed through periodic inspection by DoF.

One known public comment received it was in opposition to the designation. The comment recommended these designations originate with the DNP. The nomination was rejected. Subsequently, the Low Gap Nature Preserve was dedicated, and then designated a HCVF.